Nitrocellulose test strips with sprayed antigen, 
(solid strips stabilised on a plastic foil) 
Safety Data Sheet 
according to Regulation (EC) No. 1907/2006 (REACH) 
Date of issue: 3/29/2017 Revision date: 3/29/2017 Version: 1.00 

SECTION 1: Identification of the substance/mixture and of the company/undertaking 

1.1. Product identifier 
Trade name : Nitrocellulose test strips with sprayed antigen, (solid strips stabilised on a plastic foil) 
Article number : WEXXXGXX, WEXXXAXX, WEXXXMXX, GSD01-XXXX-AS, DEXXXGXX 
Synonyms : [NC] 

1.2. Relevant identified uses of the substance or mixture and uses advised against 
1.2.1. Relevant identified uses 
Use of the substance/mixture : In vitro diagnostics 

1.2.2. Uses advised against 
No additional information available 

1.3. Details of the supplier of the safety data sheet 
Supplier 
Virotech Diagnostics GmbH 
Löwenplatz 5 
65428 Rüsselsheim - Deutschland 
T +49 6142-69090 
qualitymanagement@virotechdiagnostics.com 
Email competent person 
sds@kft.de 

1.4. Emergency telephone number 
Emergency number : National Poison Information Service (NPIS) 
24 hour national number professionals only 
0844 892 0111 
National Health Service (NHS) 
24 hour national number consumer 
England and Scotland: 111 
Wales: 0845 46 47 
Northern Ireland: call your local General Practitioner 
Call 999 if there is a life-threatening incident. 

SECTION 2: Hazards identification 

2.1. Classification of the substance or mixture 
Classification according to Regulation (EC) No. 1272/2008 [CLP] 
Flammable solids, Category 1 H228 
Full text of hazard classes and H-statements : see section 16 

Adverse physicochemical, human health and environmental effects 
Flammable solid. 

2.2. Label elements 
Labelling according to Regulation (EC) No. 1272/2008 [CLP] 
Hazard pictograms (CLP) : 

Signal word (CLP) : Danger 
Hazard statements (CLP) : H228 - Flammable solid
Nitrocellulose test strips with sprayed antigen, (solid strips stabilised
on a plastic foil)

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according to Regulation (EC) No. 1907/2006 (REACH)

Precautionary statements (CLP) :
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P240 - Ground/bond container and receiving equipment
P280 - Wear protective gloves, eye protection, face protection

2.3. Other hazards
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>nitrocellulose</td>
<td>(CAS-No.) 9004-70-0</td>
<td>(c&lt;= 12.6% N)</td>
<td>Expl. 1.1, H201</td>
</tr>
<tr>
<td>Note T</td>
<td>(EC Index-No.) 603-037-00-6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note T: This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation :
Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact :
Wash skin with plenty of water.
First-aid measures after eye contact :
Rinse eyes with water as a precaution.
First-aid measures after ingestion :
Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
Suitable extinguishing media :
Water spray. Dry powder. Foam. Use fire fighting measures suit the environment.
Unsuitable extinguishing media :
No information available.

5.2. Special hazards arising from the substance or mixture
Fire hazard :
Flammable solid.
Hazardous decomposition products in case of fire :

5.3. Advice for firefighters
Protection during firefighting :
Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information :
Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

3/29/2017 GB - en
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Prevent entry to sewers and public waters. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Mechanically recover the product. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Ground/bond container and receiving equipment.

Storage conditions: Keep cool. Protect from sunlight. Keep away from ignition sources. Store in a well-ventilated place.

7.3. Specific end use(s)
In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Materials for protective clothing:
Use protective clothing

Hand protection:
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:
Safety glasses with side shields. EN 166

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of inadequate ventilation wear respiratory protection. In case of unintended release:
Nitrocellulose test strips with sprayed antigen, (solid strips stabilised on a plastic foil)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>185 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Flammable solid</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Flammable solid.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified (No data available)</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Parameter</th>
<th>Classification/Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified (No data available)</td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecology - general : The product has not been tested.

**12.2. Persistence and degradability**

Nitrocellulose test strips with sprayed antigen, (solid strips stabilised on a plastic foil)

Persistence and degradability : No additional information available.

**12.3. Bioaccumulative potential**

Nitrocellulose test strips with sprayed antigen, (solid strips stabilised on a plastic foil)

Bioaccumulative potential : No additional information available.

**12.4. Mobility in soil**

Nitrocellulose test strips with sprayed antigen, (solid strips stabilised on a plastic foil)

Ecology - soil : No additional information available.

**12.5. Results of PBT and vPvB assessment**

Nitrocellulose test strips with sprayed antigen, (solid strips stabilised on a plastic foil)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

**12.6. Other adverse effects**

Other adverse effects : No additional information available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Waste treatment methods : Disposal must be done according to official regulations. European waste catalogue.

Product/Packaging disposal recommendations : Comply with local regulations for disposal.

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>3270</td>
<td>3270</td>
<td>3270</td>
<td>3270</td>
<td>3270</td>
</tr>
</tbody>
</table>

**14.2. UN proper shipping name**

<table>
<thead>
<tr>
<th>NITROCELLULOSE MEMBRANE FILTERS</th>
<th>NITROCELLULOSE MEMBRANE FILTERS</th>
<th>Nitrocellulose membrane filters</th>
<th>NITROCELLULOSE MEMBRANE FILTERS</th>
<th>NITROCELLULOSE MEMBRANE FILTERS</th>
</tr>
</thead>
</table>

**Transport document description**

<table>
<thead>
<tr>
<th>UN 3270 NITROCELLULOSE MEMBRANE FILTERS, 4.1, II, (E)</th>
<th>UN 3270 NITROCELLULOSE MEMBRANE FILTERS, 4.1, II</th>
<th>UN 3270 Nitrocellulose membrane filters, 4.1, II</th>
<th>UN 3270 NITROCELLULOSE MEMBRANE FILTERS, 4.1, II</th>
<th>UN 3270 NITROCELLULOSE MEMBRANE FILTERS, 4.1, II</th>
</tr>
</thead>
</table>

**14.3. Transport hazard class(es)**

<table>
<thead>
<tr>
<th>4.1</th>
<th>4.1</th>
<th>4.1</th>
<th>4.1</th>
<th>4.1</th>
</tr>
</thead>
</table>

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14.4. Packing group

<table>
<thead>
<tr>
<th>II</th>
<th>II</th>
<th>II</th>
<th>II</th>
<th>II</th>
</tr>
</thead>
</table>

14.5. Environmental hazards

<table>
<thead>
<tr>
<th>Dangerous for the environment: No</th>
<th>Dangerous for the environment: No</th>
<th>Dangerous for the environment: No</th>
<th>Dangerous for the environment: No</th>
<th>Dangerous for the environment: No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine pollutant: No</td>
<td>Marine pollutant: No</td>
<td>Marine pollutant: No</td>
<td>Marine pollutant: No</td>
<td>Marine pollutant: No</td>
</tr>
</tbody>
</table>

No supplementary information available

14.6. Special precautions for user

- **Overland transport**
  - Classification code (ADR): F1
  - Special provisions (ADR): 237, 286
  - Limited quantities (ADR): 1kg
  - Excepted quantities (ADR): E2
  - Transport category (ADR): 2
  - Tunnel restriction code (ADR): E
  - EAC code: 1Z

- **Transport by sea**
  - Special provisions (IMDG): 237, 286
  - Limited quantities (IMDG): 1 kg
  - Excepted quantities (IMDG): E2
  - EmS-No. (Fire): F-A
  - EmS-No. (Spillage): S-I

- **Air transport**
  - PCA Excepted quantities (IATA): E2
  - PCA Limited quantities (IATA): Y458
  - PCA limited quantity max net quantity (IATA): 1kg
  - PCA packing instructions (IATA): 458
  - PCA max net quantity (IATA): 1kg
  - CAO max net quantity (IATA): 15kg
  - Special provisions (IATA): A57, A73, A122

- **Inland waterway transport**
  - Classification code (ADN): F1
  - Special provisions (ADN): 237, 286
  - Limited quantities (ADN): 1 kg
  - Excepted quantities (ADN): E2

- **Rail transport**
  - Classification code (RID): F1
  - Special provisions (RID): 237, 286
  - Limited quantities (RID): 1kg
  - Excepted quantities (RID): E2
  - Transport category (RID): 2
  - Hazard identification number (RID): 40

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Nitrocellulose test strips with sprayed antigen, (solid strips stabilised on a plastic foil)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived-No Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Median effective concentration</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOAEC</td>
<td>No-Observed Adverse Effect Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No-Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No-Observed Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>STP</td>
<td>Sewage treatment plant</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
</tbody>
</table>

Data sources:
Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.

Department issuing data specification sheet:
KFT Chemieservice GmbH
Im Leuschnerpark. 3  64347 Griesheim
Postfach 1451 64345 Griesheim
Germany
Phone: +49 6155-8981-400        Fax: +49 6155 8981-500
Safety Data Sheet Service: +49 6155 8981-522

Contact person:
Dr. Faiza Khan

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expl. 1.1</td>
<td>Explosives, Division 1.1</td>
</tr>
<tr>
<td>Flam. Sol. 1</td>
<td>Flammable solids, Category 1</td>
</tr>
<tr>
<td>H201</td>
<td>Explosive; mass explosion hazard</td>
</tr>
<tr>
<td>H228</td>
<td>Flammable solid</td>
</tr>
</tbody>
</table>

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Sol. 1</td>
<td>H228</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: Substrate (BCIP/NBT), ready to use
Article number: WE200.02, UWE200.02, GSD-10202
Synonyms: [SUBS]

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses
Use of the substance/mixture: In vitro diagnostics

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier: Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com

Email competent person: sds@kft.de

1.4. Emergency telephone number

Emergency number: National Poison Information Service (NPIS)
24 hour national number professionals only
0844 892 0111

National Health Service (NHS)
24 hour national number consumer
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable
SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Prevent entry to sewers and public waters. Avoid sub-soil penetration.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a well-ventilated place. Keep cool.
Substrate (BCIP/NBT), ready to use
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

7.3. Specific end use(s)
In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Hand protection:
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:
Safety glasses with side shields. EN 166

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>light yellow.</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>9.5 - 9.6 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Non oxidizing.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available
Substrate (BCIP/NBT), ready to use
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>pH: 9.5 - 9.6 (20 °C)</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>pH: 9.5 - 9.6 (20 °C)</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified (No data available)</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : The product has not been tested.

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance (BCIP/NBT), ready to use</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No additional information available.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance (BCIP/NBT), ready to use</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No additional information available.</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Substance (BCIP/NBT), ready to use</th>
<th>Ecology - soil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No additional information available.</td>
</tr>
</tbody>
</table>

12.5. Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Substance (BCIP/NBT), ready to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII</td>
</tr>
<tr>
<td>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects
Other adverse effects : No additional information available.
Substrate (BCIP/NBT), ready to use
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods: Disposal must be done according to official regulations. European waste catalogue.
Product/Packaging disposal recommendations: Comply with local regulations for disposal.

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>No supplementary information available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14.6. Special precautions for user

- Overland transport
  Not applicable

- Transport by sea
  Not applicable

- Air transport
  Not applicable

- Inland waterway transport
  Not applicable

- Rail transport
  Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations: A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis.

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

3/15/2017 GB - en
Substrate (BCIP/NBT), ready to use
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 16: Other information

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived-No Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Median effective concentration</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOAEC</td>
<td>No-Observed Adverse Effect Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No-Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No-Observed Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>STP</td>
<td>Sewage treatment plant</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
</tbody>
</table>

Data sources:
- Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.

Department issuing data specification sheet:
- KFT Chemieservice GmbH
  Im Leuschnerpark. 3  64347 Griesheim
  Postfach 1451 64345 Griesheim
  Germany
- Phone: +49 6155-8981-400        Fax: +49 6155 8981-500
- Safety Data Sheet Service: +49 6155 8981-522

Contact person:
- Dr. Faiza Khan

Other information:
- None.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : Dilution-/washbuffer (10x conc.)
Article number : WE200.08, UWE200.08, GSD-10601
Synonyms : [BUF]

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses
Use of the substance/mixture : In vitro diagnostics

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com

Email competent person
sds@kft.de

1.4. Emergency telephone number

Emergency number : National Poison Information Service (NPIS)
24 hour national number : 0844 892 0111
professionals only

National Health Service (NHS)
24 hour national number : England and Scotland: 111
consumer
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Skin sensitisation, Category 1 H317

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects
May cause an allergic skin reaction.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) : GHS07

Signal word (CLP) : Warning

Hazardous ingredients : reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Hazard statements (CLP) : H317 - May cause an allergic skin reaction
Precautionary statements (CLP) : P280 - Wear protective gloves  
P302+P352 - IF ON SKIN: Wash with plenty of water  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  

2.3. Other hazards  
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII  

SECTION 3: Composition/information on ingredients  

3.1. Substances  
Not applicable  

3.2. Mixtures  

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th></th>
</tr>
</thead>
</table>
| Potassium thiocyanate (Note A) | (CAS-No.) 333-20-0 (EC-No.) 206-370-1 (EC Index No.) 615-004-00-3 | 2.5 - 5 | Acute Tox. 4 (Inhalation), H332  
Acute Tox. 4 (Dermal), H312  
Acute Tox. 4 (Oral), H302  
Aquatic Chronic 3, H412 |  |
| 2-methyl-2H-isothiazol-3-one | (CAS-No.) 2682-20-4 (EC-No.) 220-239-6 | < 0.1 | Acute Tox. 3 (Inhalation), H331  
Acute Tox. 3 (Dermal), H311  
Skin Corr. 1, H314  
Skin Sens. 1, H317  
STOT SE 3, H335  
Aquatic Acute 1, H400 (M=10) |  |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) | (CAS-No.) 55965-84-9 (EC Index No.) 613-167-00-5 | < 0.1 | Acute Tox. 3 (Inhalation), H331  
Acute Tox. 3 (Dermal), H311  
Acute Tox. 3 (Oral), H301  
Skin Corr. 1B, H314  
Skin Sens. 1, H317  
Aquatic Acute 1, H400 (M=10)  
Aquatic Chronic 1, H410 |  |

Specific concentration limits:  

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
<th></th>
</tr>
</thead>
</table>
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) | (CAS-No.) 55965-84-9 (EC Index No.) 613-167-00-5 | (C >= 0.0015) Skin Sens. 1, H317  
(0.06 <=C < 0.6) Eye Irrit. 2, H319  
(0.06 <=C < 0.6) Skin Irrit. 2, H315  
(C >= 0.6) Skin Corr. 1B, H314 |  |

Note A : Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as ‘... compounds’ or ‘... salts’. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.  

Full text of H-statements: see section 16  

SECTION 4: First aid measures  

4.1. Description of first aid measures  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.  

4.2. Most important symptoms and effects, both acute and delayed  
Symptoms/effects after skin contact : May cause an allergic skin reaction.  

4.3. Indication of any immediate medical attention and special treatment needed  
Treat symptomatically.  

SECTION 5: Fire-fighting measures  

5.1. Extinguishing media  
Unsuitable extinguishing media : No information available.
5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire:

5.3. Advice for firefighters

Protection during firefighting:
Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information:
Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures:
Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment:
Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid sub-soil penetration.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up:
Take up liquid spill into absorbent material.

Other information:
Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling:
Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures:
Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:
Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Hand protection:
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer.

Eye protection:
Safety glasses with side shields. EN 166

Skin and body protection:
Wear suitable protective clothing.
Respiratory protection:

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 7.6 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Non oxidizing</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
Strong oxidizing agent. Reducing agents.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>10416 mg/kg</td>
</tr>
</tbody>
</table>
Dilution-/ washbuffer (10x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Potassium thiocyanate (333-20-0)

**LD50 oral rat**

508 mg/kg (OECD Guideline 401)

**Skin corrosion/irritation**

: Not classified (No data available)

: pH: 7 - 7.6 (20 °C)

**Serious eye damage/irritation**

: Not classified (No data available)

: pH: 7 - 7.6 (20 °C)

**Respiratory or skin sensitisation**

: May cause an allergic skin reaction.

**Germ cell mutagenicity**

: Not classified (No data available)

**Carcinogenicity**

: Not classified (No data available)

**Reproductive toxicity**

: Not classified (No data available)

**STOT-single exposure**

: Not classified (No data available)

**STOT-repeated exposure**

: Not classified (No data available)

**Aspiration hazard**

: Not classified (No data available)

---

**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecology - general :

The product has not been tested.

**12.2. Persistence and degradability**

**Dilution-/ washbuffer (10x conc.)**

Persistence and degradability :

No additional information available.

**12.3. Bioaccumulative potential**

**Dilution-/ washbuffer (10x conc.)**

Bioaccumulative potential :

No additional information available.

**12.4. Mobility in soil**

**Dilution-/ washbuffer (10x conc.)**

Ecology - soil :

No additional information available.

**12.5. Results of PBT and vPvB assessment**

**Dilution-/ washbuffer (10x conc.)**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

**12.6. Other adverse effects**

Other adverse effects :

No additional information available.

---

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Waste treatment methods :

Disposal must be done according to official regulations. European waste catalogue.

Product/Packaging disposal recommendations :

Comply with local regulations for disposal.

---

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14.1. UN number</strong></td>
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<tr>
<td><strong>14.2. UN proper shipping name</strong></td>
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<tr>
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<td>Not applicable</td>
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</tr>
<tr>
<td><strong>14.3. Transport hazard class(es)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
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<td><strong>14.4. Packing group</strong></td>
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<tr>
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</tbody>
</table>
Dilution-/ washbuffer (10x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

### 14.5. Environmental hazards

<table>
<thead>
<tr>
<th></th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
</tr>
</thead>
</table>

No supplementary information available

### 14.6. Special precautions for user

- **Overland transport**
  Not applicable

- **Transport by sea**
  Not applicable

- **Air transport**
  Not applicable

- **Inland waterway transport**
  Not applicable

- **Rail transport**
  Not applicable

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**15.1.1. EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation [EC] No 1272/2008

<table>
<thead>
<tr>
<th>Substance</th>
<th>EU Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium thiocyanate - reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</td>
<td>Potassium thiocyanate - reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</td>
</tr>
<tr>
<td>Dilution-/washbuffer (10x conc.) - Potassium thiocyanate - 2-methyl-2H-isothiazol-3-one - reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</td>
<td>Potassium thiocyanate - 2-methyl-2H-isothiazol-3-one - reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</td>
</tr>
</tbody>
</table>

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

**15.1.2. National regulations**

No additional information available

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

### SECTION 16: Other information

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived-No Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Median effective concentration</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
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</tbody>
</table>
# Dilution-/ washbuffer (10x conc.)

**Safety Data Sheet**

according to Regulation (EC) No. 1907/2006 (REACH)

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Dermal)</th>
<th>Acute toxicity (dermal), Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 3 (Inhalation)</td>
<td>Acute toxicity (inhal.), Category 3</td>
</tr>
<tr>
<td>Acute Tox. 3 (Oral)</td>
<td>Acute toxicity (oral), Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4 (Dermal)</td>
<td>Acute toxicity (dermal), Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Inhalation)</td>
<td>Acute toxicity (inhal.), Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
</tbody>
</table>

**Aquatic Acute 1** Hazardous to the aquatic environment — Acute Hazard, Category 1

**Aquatic Chronic 1** Hazardous to the aquatic environment — Chronic Hazard, Category 1

**Aquatic Chronic 3** Hazardous to the aquatic environment — Chronic Hazard, Category 3

**Skin Corr. 1** Skin corrosion/irritation, Category 1

**Skin Corr. 1B** Skin corrosion/irritation, Category 1B

**Skin Sens. 1** Skin sensitisation, Category 1

**STOT SE 3** Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

**H301** Toxic if swallowed

**H302** Harmful if swallowed

**H311** Toxic in contact with skin

**H312** Harmful in contact with skin

**H314** Causes severe skin burns and eye damage

**H317** May cause an allergic skin reaction

**H331** Toxic if inhaled

**H332** Harmful if inhaled

**H335** May cause respiratory irritation

**H400** Very toxic to aquatic life

**H410** Very toxic to aquatic life with long lasting effects

**H412** Harmful to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| Skin Sens. 1 | H317 | Calculation method |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should therefore be construed as guaranteeing any specific property of the product.
IgM-Conjugate (anti-human, 100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
Date of issue: 3/15/2017 Revision date: 3/15/2017 Version: 1.00

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Trade name: IgM-Conjugate (anti-human, 100x conc.)
Article number: WE400.82, UWE400.82, GSD-10506
Synonyms: [IgM CONJ GOAT 100 x CONC]

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Use of the substance/mixture: In vitro diagnostics

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Supplier: Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com
Email competent person: sds@kft.de

1.4. Emergency telephone number
Emergency number: National Poison Information Service (NPIS)
24 hour national number professionals only 0844 892 0111

National Health Service (NHS)
24 hour national number consumer
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner
Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Specific target organ toxicity — Repeated exposure, Category 2 H373
Full text of hazard classes and H-statements: see section 16

Adverse physicochemical, human health and environmental effects
May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP): GHS08

Signal word (CLP): Warning
Hazardous ingredients: Thiomersal
Hazard statements (CLP): H373 - May cause damage to organs (central nervous system) through prolonged or repeated exposure
IgM-Conjugate (anti-human, 100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Precautionary statements (CLP) : P260 - Do not breathe mist, vapours, spray
P314 - Get medical advice/attention if you feel unwell

2.3. Other hazards
Other hazards not contributing to the classification : Contains : Mercury (Hg).
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>(CAS-No.) 56-81-5 (EC-No.) 200-289-5</td>
<td>10 - 20</td>
<td>Not classified</td>
</tr>
<tr>
<td>Thiomersal (Note A)(Note 1)</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>0.1 - 1</td>
<td>Acute Tox. 2 (Inhalation), H330 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Oral), H300 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiomersal</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>(C &gt;= 0.1) STOT RE 2, H373</td>
</tr>
</tbody>
</table>

Note A : Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as ‘… compounds’ or ‘… salts’. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

Note 1 : The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Unsuitable extinguishing media : No information available.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Prevent entry to sewers and public waters. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a well-ventilated place. Keep cool.
Storage temperature: 2 - 8 °C

7.3. Specific end use(s)
In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>glycerol (56-81-5)</th>
<th>Local name</th>
<th>Glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³)</td>
<td>10 mg/m³ mist</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Hand protection:
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer.

Eye protection:
Safety glasses with side shields. EN 166. Safety glasses.

Skin and body protection:
Wear suitable protective clothing.

Respiratory protection:
IgM-Conjugate (anti-human, 100x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Physical state</td>
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<tr>
<td>Colour</td>
<td>colourless</td>
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<tr>
<td>Odour</td>
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<td>Odour threshold</td>
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<td>pH</td>
<td>7.8 - 8.2 (20 °C)</td>
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<td>Relative evaporation rate (butylacetate=1)</td>
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<tr>
<td>Melting point</td>
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<td>Freezing point</td>
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<tr>
<td>Boiling point</td>
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</tr>
<tr>
<td>Flash point</td>
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<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
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<td>Flammability (solid, gas)</td>
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<td>Vapour pressure</td>
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<td>Relative vapour density at 20 °C</td>
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<td>Relative density</td>
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<td>Solubility</td>
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<td>Viscosity, kinematic</td>
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<td>Viscosity, dynamic</td>
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<td>Explosive properties</td>
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<td>Oxidising properties</td>
<td>Non oxidizing</td>
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<tr>
<td>Explosive limits</td>
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</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Protect from light.

10.5. Incompatible materials


10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
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</tr>
<tr>
<td>LD50 oral</td>
<td>≥ 23000 mg/kg (Maus, male)</td>
</tr>
<tr>
<td>LC50 inhalation rat (Vapours - mg/l/4h)</td>
<td>&gt; 2.75 mg/l/4h</td>
</tr>
</tbody>
</table>

glycerol (56-81-5)

3/15/2017 GB - en
IgM-Conjugate (anti-human, 100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Skin corrosion/irritation: Not classified (No data available)
  pH: 7.8 - 8.2 (20 °C)
Serious eye damage/irritation: Not classified (No data available)
  pH: 7.8 - 8.2 (20 °C)
Respiratory or skin sensitisation: Not classified (No data available)
Germ cell mutagenicity: Not classified (No data available)
Carcinogenicity: Not classified (No data available)
Reproductive toxicity: Not classified (No data available)
STOT-single exposure: Not classified (No data available)
STOT-repeated exposure: May cause damage to organs (central nervous system) through prolonged or repeated exposure.
Aspiration hazard: Not classified (No data available)

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product has not been tested.

glycerol (56-81-5)
  LC50 fish 1: 54000 mg/l (96 h; Oncorhynchus mykiss)
  EC50 Daphnia 1: 1955 mg/l (48 h; Daphnia magna)

12.2. Persistence and degradability
IgM-Conjugate (anti-human, 100x conc.)
  Persistence and degradability: No additional information available.

glycerol (56-81-5)
  Persistence and degradability: Readily biodegradable.
  Biodegradation: 94 % (24 h)

12.3. Bioaccumulative potential
IgM-Conjugate (anti-human, 100x conc.)
  Bioaccumulative potential: No additional information available.

glycerol (56-81-5)
  Log Kow: -1.75 (25°C; pH 7.4)
  Bioaccumulative potential: Bioaccumulation unlikely.

12.4. Mobility in soil
IgM-Conjugate (anti-human, 100x conc.)
  Ecology - soil: No additional information available.

glycerol (56-81-5)
  Surface tension: ≈ 63.4 mN/m (20°C)
  Ecology - soil: No additional information available.

12.5. Results of PBT and vPvB assessment
IgM-Conjugate (anti-human, 100x conc.)
  This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component
  glycerol (56-81-5)
    This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
    This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

  Thiomersal (54-64-8)
    This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
    This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects
Other adverse effects: No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods: Disposal must be done according to official regulations. European waste catalogue.
Product/Packaging disposal recommendations: Comply with local regulations for disposal.
**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
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<td>14.1.</td>
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<td>Not applicable</td>
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<tr>
<td>14.2.</td>
<td>UN proper shipping name</td>
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<td>Not applicable</td>
<td>Not applicable</td>
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<td>14.3.</td>
<td>Transport hazard class(es)</td>
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<td></td>
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<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
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<td>14.4.</td>
<td>Packing group</td>
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<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
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<tr>
<td>14.5.</td>
<td>Environmental hazards</td>
<td></td>
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<td></td>
</tr>
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<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user

- Overland transport
  Not applicable
- Transport by sea
  Not applicable
- Air transport
  Not applicable
- Inland waterway transport
  Not applicable
- Rail transport
  Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

**SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

<table>
<thead>
<tr>
<th>3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>IgM-Conjugate (anti-human,100x conc.)</td>
</tr>
</tbody>
</table>

18. Mercury compounds

Thiomersal

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

**SECTION 16: Other information**

Abbreviations and acronyms:

| ADN | Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Convention on international transport by sea of dangerous goods) |
# IgM-Conjugate (anti-human, 100x conc.)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived-No Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Median effective concentration</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOAEC</td>
<td>No-Observed Adverse Effect Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No-Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No-Observed Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>STP</td>
<td>Sewage treatment plant</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
</tbody>
</table>

**Data sources**: Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.

**Department issuing data specification sheet**: KFT Chemieservice GmbH  
Im Leuschnerpark, 3 64347 Griesheim  
Postfach 1451 64345 Griesheim  
Germany  

Phone: +49 6155-8981-400  
Fax: +49 6155 8981-500  
Safety Data Sheet Service: +49 6155 8981-522

**Contact person**: Dr. Faiza Khan

**Other information**: None.

**Full text of H- and EUH-statements**:

| Acute Tox. 1 (Dermal) | Acute toxicity (dermal), Category 1 |
| Acute Tox. 2 (Inhalation) | Acute toxicity (inhal.), Category 2 |
| Acute Tox. 2 (Oral) | Acute toxicity (oral), Category 2 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2 |
| H300 | Fatal if swallowed |
| H310 | Fatal in contact with skin |
| H330 | Fatal if inhaled |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]**:  

| STOT RE 2 | H373 | Calculation method |

---

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: IgA-Conjugate (anti-human, 100x conc.)
Article number: WE400.42
Synonyms: [IgA CONJ GOAT 100 x CONC]

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture: In vitro diagnostics

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier: Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com

Email competent person: sds@kf.de

1.4. Emergency telephone number

Emergency number: National Poison Information Service (NPIS)
24 hour national number professionals only 0844 892 0111
National Health Service (NHS)
24 hour national number consumer
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner
Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Specific target organ toxicity — Repeated exposure, Category 2 H373

Full text of hazard classes and H-statements: see section 16

Adverse physicochemical, human health and environmental effects
May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP): GHS08

Signal word (CLP): Warning

Hazardous ingredients: Thiomersal

Hazard statements (CLP): H373 - May cause damage to organs (central nervous system) through prolonged or repeated exposure

3/15/2017
GB - en
Precautionary statements (CLP) : P260 - Do not breathe mist, vapours, spray
P314 - Get medical advice/attention if you feel unwell

2.3. Other hazards
Other hazards not contributing to the classification : Contains : Mercury (Hg).

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>(CAS-No.) 56-81-5 (EC-No.) 200-289-5</td>
<td>10 - 20</td>
<td>Not classified</td>
</tr>
<tr>
<td>Thiomersal (Note A)(Note 1)</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>0.1 - 1</td>
<td>Acute Tox. 2 (Inhalation), H330 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Oral), H300 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiomersal</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>(C &gt;= 0.1) STOT RE 2, H373</td>
</tr>
</tbody>
</table>

Note A : Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as ‘... compounds’ or ‘... salts’. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

Note 1 : The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Unsuitable extinguishing media : No information available.

5.2. Special hazards arising from the substance or mixture

**5.3. Advice for firefighters**

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**6.1.1. For non-emergency personnel**

Emergency procedures: Ventilate spillage area.

**6.1.2. For emergency responders**

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

**6.4. Reference to other sections**

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions: Store in a well-ventilated place. Keep cool.

Storage temperature: 2 - 8 °C

**7.3. Specific end use(s)**

In vitro diagnostics.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

<table>
<thead>
<tr>
<th>glycerol <em>(56-81-5)</em></th>
<th>United Kingdom</th>
<th>Local name</th>
<th>Glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>WEL TWA <em>(mg/m³)</em></td>
<td>10 mg/m³ mist</td>
<td></td>
</tr>
</tbody>
</table>

**8.2. Exposure controls**

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

**Materials for protective clothing:**
Use protective clothing

**Hand protection:**
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

**Eye protection:**
Safety glasses with side shields. EN 166. Safety glasses

**Skin and body protection:**
Wear suitable protective clothing
Respiratory protection:

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.8 - 8.2 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Non oxidizing.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Protect from light.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity                                  | Not classified (No data available)
IgA-Conjugate (anti-human, 100x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

glycerol (56-81-5)
LD50 oral ≈ 23000 mg/kg (Maus, male)
LC50 inhalation rat (Vapours - mg/l/4h) > 2.75 mg/l/4h

Skin corrosion/irritation: Not classified (No data available)
  pH: 7.8 - 8.2 (20 °C)
Serious eye damage/irritation: Not classified (No data available)
  pH: 7.8 - 8.2 (20 °C)
Respiratory or skin sensitisation: Not classified (No data available)
Germ cell mutagenicity: Not classified (No data available)
Carcinogenicity: Not classified (No data available)
Reproductive toxicity: Not classified (No data available)
STOT-single exposure: Not classified (No data available)
STOT-repeated exposure: May cause damage to organs (central nervous system) through prolonged or repeated exposure.
Aspiration hazard: Not classified (No data available)

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product has not been tested.
glycerol (56-81-5)
LC50 fish 1 54000 mg/l (96 h; Oncorhynchus mykiss)
EC50 Daphnia 1 1955 mg/l (48 h; Daphnia magna)

12.2. Persistence and degradability
IgA-Conjugate (anti-human, 100x conc.)
Persistence and degradability: No additional information available.
glycerol (56-81-5)
Persistence and degradability: Readily biodegradable.
  Biodegradation: 94 % (24 h)

12.3. Bioaccumulative potential
IgA-Conjugate (anti-human, 100x conc.)
Bioaccumulative potential: No additional information available.
glycerol (56-81-5)
Log Kow: -1.75 (25°C; pH 7.4)
Bioaccumulative potential: Bioaccumulation unlikely.

12.4. Mobility in soil
IgA-Conjugate (anti-human, 100x conc.)
Ecology - soil: No additional information available.
glycerol (56-81-5)
Surface tension: ≈ 63.4 mN/m (20°C)
Ecology - soil: No additional information available.

12.5. Results of PBT and vPvB assessment
IgA-Conjugate (anti-human, 100x conc.)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Component
glycerol (56-81-5) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
  This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Thiomersal (54-64-8) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
  This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects
Other adverse effects: No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods: Disposal must be done according to official regulations. European waste catalogue.
Product/Packaging disposal recommendations: Comply with local regulations for disposal.
IgA-Conjugate (anti-human, 100x conc.)
Safety Data Sheet
going according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1.UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2.UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3.Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4.Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5.Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

14.6.Special precautions for user
- Overland transport
  Not applicable
- Transport by sea
  Not applicable
- Air transport
  Not applicable
- Inland waterway transport
  Not applicable
- Rail transport
  Not applicable

14.7.Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

| 3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 |
| IgA-Conjugate (anti-human, 100x conc.) |

18. Mercury compounds
Thiomersal

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

| ADN | Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European 

3/15/2017   GB - en
IgA-Conjugate (anti-human, 100x conc.)
Safety Data Sheet

Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF Bioconcentration factor
CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL Derived-No Effect Level
EC50 Median effective concentration
IATA International Air Transport Association
IMDG International Maritime Code for Dangerous Goods
LOAEL Lowest Observed Adverse Effect Level
NOAEC No-Observed Adverse Effect Concentration
NOAEL No-Observed Adverse Effect Level
NOEC No-Observed Effect Concentration
PBT Persistent Bioaccumulative Toxic
PNEC Predicted No-Effect Concentration
RID Regulations concerning the International Carriage of Dangerous Goods by Rail
STP Sewage treatment plant
vPvB Very Persistent and Very Bioaccumulative

Data sources: Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.
Department issuing data specification sheet: KFT Chemieservice GmbH
Im Leuschnerpark. 3 64347 Griesheim
Postfach 1451 64345 Griesheim
Germany
Phone: +49 6155 8981-400 Fax: +49 6155 8981-500
Safety Data Sheet Service: +49 6155 8981-522

Contact person: Dr. Faiza Khan

Other information: None.

Full text of H- and EUH-statements:

Acute Tox. 1 (Dermal) Acute toxicity (dermal), Category 1
Acute Tox. 2 (Inhalation) Acute toxicity (inhal.), Category 2
Acute Tox. 2 (Oral) Acute toxicity (oral), Category 2
Aquatic Acute 1 Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1 Hazardous to the aquatic environment — Chronic Hazard, Category 1
STOT RE 2 Specific target organ toxicity — Repeated exposure, Category 2
H300 Fatal if swallowed
H310 Fatal in contact with skin
H330 Fatal if inhaled
H373 May cause damage to organs through prolonged or repeated exposure
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):

STOT RE 2 H373 Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
IgG-Conjugate (anti-human,100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
Date of issue: 3/15/2017 Revision date: 3/15/2017 Version: 1.00

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Trade name : IgG-Conjugate (anti-human,100x conc.)
Article number : WE400.62, UWE400.62, GSD-10505
Synonyms : [IgG CONJ GOAT 100 x CONC]

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses
Use of the substance/mixture : In vitro diagnostics

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Supplier
Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com

Email competent person
sds@kft.de

1.4. Emergency telephone number
Emergency number
National Poison Information Service (NPIS) 24 hour national number professionals only
0844 892 0111
National Health Service (NHS) 24 hour national number consumer
England and Scotland: 111 Wales: 0845 46 47
Northern Ireland: call your local General Practitioner
Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Specific target organ toxicity — Repeated exposure, Category 2  H373

Adverse physicochemical, human health and environmental effects
May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP) :

Signal word (CLP) : Warning
Hazardous ingredients : Thiomersal
Hazard statements (CLP) : H373 - May cause damage to organs (central nervous system) through prolonged or repeated exposure
IgG-Conjugate (anti-human, 100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Precautionary statements (CLP):
P260 - Do not breathe mist, vapours, spray
P314 - Get medical advice/attention if you feel unwell

2.3. Other hazards
Other hazards not contributing to the classification:
Contains: Mercury (Hg).
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>(CAS-No.) 56-81-5 (EC-No.) 200-289-5</td>
<td>10 - 20</td>
<td>Not classified</td>
</tr>
<tr>
<td>Thiomersal (Note A) (Note 1)</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>0.1 - 1</td>
<td>Acute Tox. 2 (Inhalation), H330 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Oral), H300 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
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Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiomersal</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>(( C \geq 0.1 )) STOT RE 2, H373</td>
</tr>
</tbody>
</table>

Note A: Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as ‘... compounds’ or ‘... salts’. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

Storage temperature: 2 - 8 °C

7.3. Specific end use(s)

In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Glycerol (56-81-5)</th>
<th>Local name</th>
<th>WEL TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>Glycerol</td>
<td>10 mg/m³ mist</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Materials for protective clothing:
Use protective clothing

Hand protection:
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:
Safety glasses with side shields. EN 166. Safety glasses

Skin and body protection:
Wear suitable protective clothing
Respiratory protection:

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.8 - 8.2 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Non oxidizing.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Protect from light.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified (No data available)
**IgG-Conjugate (anti-human, 100x conc.)**

**Safety Data Sheet**

according to Regulation (EC) No. 1907/2006 (REACH)

<table>
<thead>
<tr>
<th>glycerol (56-81-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LD50 oral</strong></td>
</tr>
<tr>
<td><strong>LC50 inhalation rat (Vapours - mg/l/4h)</strong></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**

: Not classified (No data available)

**pH:** 7.8 - 8.2 (20 °C)

**Serious eye damage/irritation**

: Not classified (No data available)

**pH:** 7.8 - 8.2 (20 °C)

**Respiratory or skin sensitisation**

: Not classified (No data available)

**Germ cell mutagenicity**

: Not classified (No data available)

**Carcinogenicity**

: Not classified (No data available)

**Reproductive toxicity**

: Not classified (No data available)

**STOT-single exposure**

: Not classified (No data available)

**STOT-repeated exposure**

: May cause damage to organs (central nervous system) through prolonged or repeated exposure.

Aspiration hazard

: Not classified (No data available)

**SECTION 12: Ecological information**

12.1. Toxicity

**Ecology - general**

: The product has not been tested.

**glycerol (56-81-5)**

| **LC50 fish 1** | 54000 mg/l (96 h; Oncorhynchus mykiss) |
| **EC50 Daphnia 1** | 1955 mg/l (48 h; Daphnia magna) |

12.2. Persistence and degradability

**IgG-Conjugate (anti-human, 100x conc.)**

Persistence and degradability

: No additional information available.

**glycerol (56-81-5)**

Persistence and degradability

: Readily biodegradable.

Biodegradation

: 94 % (24 h)

12.3. Bioaccumulative potential

**IgG-Conjugate (anti-human, 100x conc.)**

Bioaccumulative potential

: No additional information available.

**glycerol (56-81-5)**

Log Kow

: -1.75 (25°C; pH 7.4)

Bioaccumulative potential

: Bioaccumulation unlikely.

12.4. Mobility in soil

**IgG-Conjugate (anti-human, 100x conc.)**

Ecology - soil

: No additional information available.

**glycerol (56-81-5)**

Surface tension

: 63.4 mN/m (20°C)

Ecology - soil

: No additional information available.

12.5. Results of PBT and vPvB assessment

**IgG-Conjugate (anti-human, 100x conc.)**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

**Component**

<table>
<thead>
<tr>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol (56-81-5)</td>
</tr>
<tr>
<td>Thiomersal (54-64-8)</td>
</tr>
</tbody>
</table>

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects

: No additional information available.

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Waste treatment methods

: Disposal must be done according to official regulations. European waste catalogue.

Product/Packaging disposal recommendations

: Comply with local regulations for disposal.

3/15/2017

GB - en

5/7
IgG-Conjugate (anti-human, 100x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user

- Overland transport
  Not applicable

- Transport by sea
  Not applicable

- Air transport
  Not applicable

- Inland waterway transport
  Not applicable

- Rail transport
  Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

IgG-Conjugate (anti-human, 100x conc.)

18. Mercury compounds

Thiomersal

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European
IgG-Conjugate (anti-human, 100x conc.)
Safety Data Sheet

Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR
Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

BCF
Bioconcentration factor

CLP
Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DNEL
Derived-No Effect Level

EC50
Median effective concentration

IATA
International Air Transport Association

IMDG
International Maritime Code for Dangerous Goods

LC50
Median lethal concentration

LOAEL
Lowest Observed Adverse Effect Level

NOAEC
No-Observed Adverse Effect Concentration

NOAEL
No-Observed Adverse Effect Level

NOEC
No-Observed Effect Concentration

PBT
Persistent Bioaccumulative Toxic

PNEC
Predicted No-Effect Concentration

RID
Regulations concerning the International Carriage of Dangerous Goods by Rail

STP
Sewage treatment plant

vPvB
Very Persistent and Very Bioaccumulative

Data sources:
Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.

Department issuing data specification sheet:
KFT Chemieservice GmbH
Im Leuschnerpark, 3 64347 Griesheim
Postfach 1451 64345 Griesheim
Germany
Phone: +49 6155-8981-400 Fax: +49 6155 8981-500
Safety Data Sheet Service: +49 6155 8981-522

Contact person:
Dr. Faiza Khan

Other information:
None.

Full text of H- and EUH-statements:

Acute Tox. 1 (Dermal)
Acute toxicity (dermal), Category 1

Acute Tox. 2 (Inhalation)
Acute toxicity (inhal.), Category 2

Acute Tox. 2 (Oral)
Acute toxicity (oral), Category 2

Aquatic Acute 1
Hazardous to the aquatic environment — Acute Hazard, Category 1

Aquatic Chronic 1
Hazardous to the aquatic environment — Chronic Hazard, Category 1

STOT RE 2
Specific target organ toxicity — Repeated exposure, Category 2

H300
Fatal if swallowed

H310
Fatal in contact with skin

H330
Fatal if inhaled

H373
May cause damage to organs through prolonged or repeated exposure

H400
Very toxic to aquatic life

H410
Very toxic to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

STOT RE 2
Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| Trade name | IgG / IgM / IgA Control Sera (negative, cut off, positive control), IgG-Quantification-Set in buffer ZB200.7 |
| Article number | 110101, 110102, 110103, 110801, 110802, 110803, 110804, 110805, 110806, 111804, 111805, 111806, 113001, 113002, 113003, 113004, 113005, 113101, 113102, 113103, 113104, 113105, 113106, 121401, 121402, 121403, 121416, 121417, 121418, 121554, 121555, 121556, DE226C61, DE226C62, UWE227C60, UWE227C80, UWE227N10, UWE227P60, UWE227P80, WE102N10, WE102P60, WE102P80, WE116N20, WE116P40, WE116P60, WE130N60, WE130P60, WE150N10, WE150P60, WE150P80, WE214C40, WE214C60, WE214C80, WE214N50, WE214P40, WE214P60, WE214P80, WE222N10, WE222P60, WE222P80, WE223N60, WE223P60, WE224N10, WE224P60, WE224P80, WE225N60, WE225P60, WE242C40, WE242C60, WE242C80, WE242N20, WE242P40, WE242P60, WE242P80, WE243N20, WE243N60, WE243P40, WE243P60, GSD-10701, GSD01-1022-CAL, GSD01-1022-PC, GSD01-1023-CAL, GSD01-1023-PC |

| Synonyms | [CONTRL NEG, POS, CO, CAL, HRC, LRC IgM IgG IgA] |

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture: In vitro diagnostics

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

| Supplier | Email competent person |
| Virotech Diagnostics GmbH | sds@kft.de |
| Löwenplatz 5 | |
| 65428 Rüsselsheim - Deutschland | |
| T +49 6142-69090 | |
| qualitymanagement@virotechdiagnostics.com | |

1.4. Emergency telephone number

| Emergency number | National Poison Information Service (NPIS) |
| 24 hour national number: | professionals only |
| 0844 892 0111 | |

| National Health Service (NHS) | England and Scotland: 111 |
| 24 hour national number | Wales: 0845 46 47 |
| consumer | Northern Ireland: call your local General Practitioner |

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1 H317

Full text of hazard classes and H-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction.

3/29/2017 GB - en 1/7
IgG / IgM / IgA Control Sera (negative, cut off, positive control), IgG-Quantification-Set in buffer ZB200.7

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):

Signal word (CLP): Warning

Hazardous ingredients:
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Hazard statements (CLP):
H317 - May cause an allergic skin reaction

Precautionary statements (CLP):
P280 - Wear protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methyl-2H-isothiazol-3-one</td>
<td>(CAS No.) 2682-20-4 (EC No.) 220-239-6</td>
<td>&lt; 0.1</td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1, H314 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10)</td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</td>
<td>(CAS No.) 55965-84-9 (EC Index No.) 613-167-00-5</td>
<td>&lt; 0.1</td>
<td>Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7], and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</td>
<td>(CAS No.) 55965-84-9 (EC Index No.) 613-167-00-5</td>
<td>[C &gt;= 0.0015] Skin Sens. 1, H317 (0.06 &lt;= C &lt; 0.6) Eye Irrit. 2, H319 (0.06 &lt;= C &lt; 0.6) Skin Irrit. 2, H315 (C &gt;= 0.6) Skin Corr. 1B, H314</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact: May cause an allergic skin reaction.
IgG / IgM / IgA Control Sera (negative, cut off, positive control), IgG-Quantification-Set in buffer ZB200.7

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Avoid sub-soil penetration.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)
In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Appropriate engineering controls:
Ensure good ventilation of the work station.
Hand protection:  
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer.

Eye protection:  
Safety glasses with side shields. EN 166

Skin and body protection:  
Wear suitable protective clothing

Respiratory protection:  

Environmental exposure controls:  
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 7.2 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Non oxidizing</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).
10.5. Incompatible materials
No additional information available.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (No data available)
Skin corrosion/irritation : Not classified (No data available)
  pH: 7 - 7.2 (20 °C)
Serious eye damage/irritation : Not classified (No data available)
  pH: 7 - 7.2 (20 °C)
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified (No data available)
Carcinogenicity : Not classified (No data available)
Reproductive toxicity : Not classified (No data available)
STOT-single exposure : Not classified (No data available)
STOT-repeated exposure : Not classified (No data available)
Aspiration hazard : Not classified (No data available)

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : The product has not been tested.

12.2. Persistence and degradability

Environment - general : No additional information available.

12.3. Bioaccumulative potential

Environment - general : No additional information available.

12.4. Mobility in soil

Environment - soil : No additional information available.

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects
Other adverse effects : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods : Disposal must be done according to official regulations. European waste catalogue.
Product/Packaging disposal recommendations : Comply with local regulations for disposal.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
### 14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>UN hazard class(es)</th>
<th>Packing group</th>
<th>UN transport symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Hazard class</th>
<th>UN number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 14.4. Packing group

<table>
<thead>
<tr>
<th>Packing group</th>
<th>UN number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 14.5. Environmental hazards

<table>
<thead>
<tr>
<th>Environmental hazard</th>
<th>UN number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 14.6. Special precautions for user

- **Overland transport**
  - Not applicable

- **Transport by sea**
  - Not applicable

- **Air transport**
  - Not applicable

- **Inland waterway transport**
  - Not applicable

- **Rail transport**
  - Not applicable

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

<table>
<thead>
<tr>
<th>Regulation/legislation</th>
<th>Specific for substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-Regulations</td>
<td>Contains no REACH Annex XIV substances</td>
</tr>
</tbody>
</table>

**EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008; Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008; Hazard class 4.1

---

Contains no substance on the REACH candidate list

---

**15.1.2. National regulations**

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out
Abreviations and acronyms:

ADN  Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR  Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF  Bioconcentration factor
CLP  Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL  Derived-No Effect Level
EC50  Median effective concentration
IATA  International Air Transport Association
IMDG  International Maritime Code for Dangerous Goods
LC50  Median lethal concentration
LOAEL  Lowest Observed Adverse Effect Level
NOAEC  No-Observed Adverse Effect Concentration
NOAEL  No-Observed Adverse Effect Level
NOEC  No-Observed Effect Concentration
PBT  Persistent Bioaccumulative Toxic
PNEC  Predicted No-Effect Concentration
RID  Regulations concerning the International Carriage of Dangerous Goods by Rail
STP  Sewage treatment plant
vPvB  Very Persistent and Very Bioaccumulative

Data sources:
Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.

Department issuing data specification sheet:
KFT Chemieservice GmbH
Im Leuschnerpark. 3  64347 Griesheim
Postfach 1451 64345 Griesheim
Germany

Phone: +49 6155-8981-400    Fax: +49 6155 8981-500
Safety Data Sheet Service: +49 6155 8981-522

Contact person:
Dr. Faiza Khan

Other information:
None.

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)  Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)  Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)  Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)  Acute toxicity (oral), Category 4
Aquatic Acute 1  Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1  Hazardous to the aquatic environment — Chronic Hazard, Category 1
Skin Corr. 1  Skin corrosion/irritation, Category 1
Skin Corr. 1B  Skin corrosion/irritation, Category 1B
Skin Sens. 1  Skin sensitisation, Category 1
STOT SE 3  Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H301  Toxic if swallowed
H302  Harmful if swallowed
H311  Toxic in contact with skin
H314  Causes severe skin burns and eye damage
H317  May cause an allergic skin reaction
H331  Toxic if inhaled
H355  May cause respiratory irritation
H400  Very toxic to aquatic life
H410  Very toxic to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1  H317  Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

<table>
<thead>
<tr>
<th>Trade name</th>
<th>IgG / IgM / IgA Cut off Control (human serum, prediluted) in buffer ZWB12205</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article number</td>
<td>WE102C60, WE102C80, WE116C40, WE116C60, WE130C60, WE150C60, WE150C80, WE222C60, WE222C80, WE223C60, WE224C60, WE224C80, WE225C60, WE242C40, WE242C60, WE243C40, WE243C60</td>
</tr>
<tr>
<td>Synonyms</td>
<td>[CO]</td>
</tr>
</tbody>
</table>

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture: In vitro diagnostics

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier: Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com

Email competent person: sds@kft.de

1.4. Emergency telephone number

Emergency number: National Poison Information Service (NPIS)
24 hour national number professionals only: 0844 892 0111

National Health Service (NHS)
24 hour national number consumer:
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
IgG / IgM / IgA Cut off Control (human serum, prediluted) in buffer ZWB12205

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>(CAS-No.) 56-81-5</td>
<td>10 - 20</td>
<td>Not classified</td>
</tr>
<tr>
<td>substance with national workplace exposure limit(s) (GB)</td>
<td>(EC-No.) 200-289-5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture


5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid sub-soil penetration.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.
SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)
In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>glycerol (56-81-5)</th>
<th>Local name</th>
<th>Glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³)</td>
<td>10 mg/m³ mist</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Hand protection:
Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer.

Eye protection:
Safety glasses with side shields. EN 166

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 7.4 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Decomposition temperature: No data available
Flammability (solid, gas): Not applicable
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
Solubility: Water: Soluble
Log Pow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidising properties: Non oxidizing
Explosive limits: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
Strong oxidizing agent.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified (No data available)

glycerol (56-81-5)
LD50 oral: > 23000 mg/kg (Maus, male)
LC50 inhalation rat (Vapours - mg/l/4h): > 2.75 mg/l/4h
Skin corrosion/irritation: Not classified (No data available) pH: 7 - 7.4 (20 °C)
Serious eye damage/irritation: Not classified (No data available) pH: 7 - 7.4 (20 °C)
Respiratory or skin sensitisation: Not classified (No data available)
Germ cell mutagenicity: Not classified (No data available)
Carcinogenicity: Not classified (No data available)
Reproductive toxicity: Not classified (No data available)
STOT-single exposure: Not classified (No data available)
STOT-repeated exposure: Not classified (No data available)
Aspiration hazard: Not classified (No data available)

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product has not been tested.
IgG / IgM / IgA Cut off Control (human serum, prediluted) in buffer ZWB12205

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

glycerol (56-81-5)

12.2. Persistence and degradability

IgG / IgM / IgA Cut off Control (human serum, prediluted) in buffer ZWB12205

Persistence and degradability

No additional information available.

glycerol (56-81-5)

Persistence and degradability

Readily biodegradable.

Biodegradation

94 % (24 h)

12.3. Bioaccumulative potential

IgG / IgM / IgA Cut off Control (human serum, prediluted) in buffer ZWB12205

Bioaccumulative potential

No additional information available.

glycerol (56-81-5)

Log Kow

-1.75 (25°C; pH 7.4)

Bioaccumulative potential

Bioaccumulation unlikely.

12.4. Mobility in soil

IgG / IgM / IgA Cut off Control (human serum, prediluted) in buffer ZWB12205

Ecology - soil

No additional information available.

glycerol (56-81-5)

Surface tension

≈ 63.4 mN/m (20°C)

Ecology - soil

No additional information available.

12.5. Results of PBT and vPvB assessment

IgG / IgM / IgA Cut off Control (human serum, prediluted) in buffer ZWB12205

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component

glycerol (56-81-5)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Disposal must be done according to official regulations. European waste catalogue.

Product/Packaging disposal recommendations

Comply with local regulations for disposal.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

No supplementary information available
14.6. Special precautions for user

- Overland transport
  Not applicable

- Transport by sea
  Not applicable

- Air transport
  Not applicable

- Inland waterway transport
  Not applicable

- Rail transport
  Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived-No Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Median effective concentration</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOAEC</td>
<td>No-Observed Adverse Effect Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No-Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No-Observed Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>STP</td>
<td>Sewage treatment plant</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
</tbody>
</table>

Data sources: Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Trade name: Anti-dog IgG conjugate (100x conc.)
   Article number: DE400.61
   Synonyms: [HUND CONJ RABBIT 100 x CONC IgG]

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses
   Use of the substance/mixture: In vitro diagnostics

1.2.2. Uses advised against
   No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier: Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com

Email competent person: sds@kft.de

1.4. Emergency telephone number

Emergency number: National Poison Information Service (NPIS)
24 hour national number: 0844 892 0111
   professionals only

National Health Service (NHS)
24 hour national number: 0845 46 47
   consumer
   England and Scotland: 111
   Wales: 0845 46 47
   Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Specific target organ toxicity — Repeated exposure, Category 2  H373

Adverse physicochemical, human health and environmental effects
May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):

GHS08

Signal word (CLP): Warning
Hazardous ingredients: Thiomersal
Hazard statements (CLP): H373 - May cause damage to organs (central nervous system) through prolonged or repeated exposure
Anti-dog IgG conjugate (100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Precautionary statements (CLP):
P260 - Do not breathe mist, vapours, spray
P314 - Get medical advice/attention if you feel unwell

2.3. Other hazards
Other hazards not contributing to the classification:
Contains: Mercury (Hg).
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>(CAS-No.) 56-81-5</td>
<td>10 - 20</td>
<td>Not classified</td>
</tr>
<tr>
<td></td>
<td>(EC-No.) 200-289-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thiomersal (Note A)(Note 1)</td>
<td>(CAS-No.) 54-64-8</td>
<td>0.1 - 1</td>
<td>Acute Tox. 2 (Inhalation), H330</td>
</tr>
<tr>
<td></td>
<td>(EC-No.) 200-210-4</td>
<td></td>
<td>Acute Tox. 1 (Dermal), H310</td>
</tr>
<tr>
<td></td>
<td>(EC Index-No.) 080-004-00-7</td>
<td></td>
<td>Acute Tox. 2 (Oral), H300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT RE 2, H373</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiomersal</td>
<td>(CAS-No.) 54-64-8</td>
<td>(C &gt;= 0.1) STOT RE 2, H373</td>
</tr>
<tr>
<td></td>
<td>(EC-No.) 200-210-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(EC Index-No.) 080-004-00-7</td>
<td></td>
</tr>
</tbody>
</table>

Note A: Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as ‘... compounds’ or ‘... salts’. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture

Anti-dog IgG conjugate (100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

5.3.  Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1.  Personal precautions, protective equipment and emergency procedures

6.1.1.  For non-emergency personnel

Emergency procedures: Ventilate spillage area.

6.1.2.  For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2.  Environmental precautions

Prevent entry to sewers and public waters. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

6.3.  Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

6.4.  Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1.  Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2.  Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

Storage temperature: 2 - 8 °C

7.3.  Specific end use(s)

In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1.  Control parameters

<table>
<thead>
<tr>
<th>glycerol (56-81-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

8.2.  Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:

Safety glasses with side shields. EN 166. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Anti-dog IgG conjugate (100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.8 - 8.2 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Non oxidizing.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Protect from light.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>LD50 oral</td>
<td>23000 mg/kg (Maus, male)</td>
</tr>
<tr>
<td>LC50 inhalation rat (Vapours - mg/l/4h)</td>
<td>&gt; 2.75 mg/l/4h</td>
</tr>
</tbody>
</table>
## Skin corrosion/irritation
- Not classified (No data available)
  - pH: 7.8 - 8.2 (20 °C)

## Serious eye damage/irritation
- Not classified (No data available)
  - pH: 7.8 - 8.2 (20 °C)

## Respiratory or skin sensitisation
- Not classified (No data available)

## Germ cell mutagenicity
- Not classified (No data available)

## Carcinogenicity
- Not classified (No data available)

## Reproductive toxicity
- Not classified (No data available)

## STOT-single exposure
- Not classified (No data available)

## STOT-repeated exposure
- May cause damage to organs (central nervous system) through prolonged or repeated exposure.

## Aspiration hazard
- Not classified (No data available)

### SECTION 12: Ecological information

#### 12.1. Toxicity

<table>
<thead>
<tr>
<th>Ecology - general</th>
<th>The product has not been tested.</th>
</tr>
</thead>
</table>

**glycerol (56-81-5)**
- LC50 fish 1: 54000 mg/l (96 h; Oncorhynchus mykiss)
- EC50 Daphnia 1: 1955 mg/l (48 h; Daphnia magna)

#### 12.2. Persistence and degradability

**Anti-dog IgG conjugate (100x conc.)**
- Persistence and degradability: No additional information available.

**glycerol (56-81-5)**
- Persistence and degradability: Readily biodegradable.
- Biodegradation: 94 % (24 h)

#### 12.3. Bioaccumulative potential

**Anti-dog IgG conjugate (100x conc.)**
- Bioaccumulative potential: No additional information available.

**glycerol (56-81-5)**
- Log Kow: -1.75 (25°C; pH 7,4)
- Bioaccumulative potential: Bioaccumulation unlikely.

#### 12.4. Mobility in soil

**Anti-dog IgG conjugate (100x conc.)**
- Ecology - soil: No additional information available.

**glycerol (56-81-5)**
- Surface tension: ≈ 63.4 mN/m (20°C)
- Ecology - soil: No additional information available.

#### 12.5. Results of PBT and vPvB assessment

**Anti-dog IgG conjugate (100x conc.)**
- This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
- This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

**Component**
- glycerol (56-81-5)
  - This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
  - This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

- Thiomersal (54-64-8)
  - This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
  - This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Other adverse effects

- Other adverse effects: No additional information available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

<table>
<thead>
<tr>
<th>Waste treatment methods</th>
<th>Disposal must be done according to official regulations. European waste catalogue.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/Packaging disposal recommendations</td>
<td>Comply with local regulations for disposal.</td>
</tr>
</tbody>
</table>
Anti-dog IgG conjugate (100x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user
- Overland transport
  Not applicable
- Transport by sea
  Not applicable
- Air transport
  Not applicable
- Inland waterway transport
  Not applicable
- Rail transport
  Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

18. Mercury compounds
Thiomersal

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:
ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European...
Anti-dog IgG conjugate (100x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

**Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways:** ADR

**Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008:** CLP

**Derived-No Effect Level:** DNEL

**Median effective concentration:** EC50

**International Air Transport Association:** IATA

**International Maritime Code for Dangerous Goods:** IMDG

**Lowest Observed Adverse Effect Level:** LOAEL

**No-Observed Adverse Effect Concentration:** NOAEC

**No-Observed Effect Concentration:** NOEC

**Persistent Bioaccumulative Toxic:** PBT

**Predicted No-Effect Concentration:** PNEC

**Regulations concerning the International Carriage of Dangerous Goods by Rail:** RID

**Sewage treatment plant:** STP

**Very Persistent and Very Bioaccumulative:** vPvB

**Data sources:**
Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.

**Department issuing data specification sheet:**
KFT Chemieservice GmbH
Im Leuschnerpark. 3  64347 Griesheim
Postfach 1451 64345 Griesheim
Germany
Phone: +49 6155-8981-400     Fax: +49 6155 8981-500
Safety Data Sheet Service: +49 6155 8981-522

**Contact person:**
Dr. Faiza Khan

**Other information:**
None.

**Full text of H- and EUH-statements:**

<table>
<thead>
<tr>
<th>H300</th>
<th>Fatal if swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>H310</td>
<td>Fatal in contact with skin</td>
</tr>
<tr>
<td>H330</td>
<td>Fatal if inhaled</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

| STOT RE 2 | H373 | Calculation method |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| Trade name | Anti-horse IgG conjugate (100x conc.) |
| Article number | DE400.62 |
| Synonyms | [PFERD CONJ RABBIT 100 x CONC IgG] |

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture: In vitro diagnostics

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Virotech Diagnostics GmbH
Löwenplatz 5
65428 Rüsselsheim - Deutschland
T +49 6142-69090
qualitymanagement@virotechdiagnostics.com

Email competent person
sds@kft.de

1.4. Emergency telephone number

Emergency number
National Poison Information Service (NPIS)
24 hour national number professionals only
0844 892 0111

National Health Service (NHS)
24 hour national number consumer
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Specific target organ toxicity — Repeated exposure, Category 2 H373

Adverse physicochemical, human health and environmental effects

May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)
GHS08

Signal word (CLP): Warning

Hazardous ingredients: Thiomersal

Hazard statements (CLP): H373 - May cause damage to organs (central nervous system) through prolonged or repeated exposure
Anti-horse IgG conjugate (100x conc.)
Safety Data Sheet

Precautionary statements (CLP)
- P260 - Do not breathe mist, vapours, spray
- P314 - Get medical advice/attention if you feel unwell

2.3. Other hazards
Other hazards not contributing to the classification: Contains: Mercury (Hg).

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>(CAS-No.) 56-81-5 (EC-No.) 200-289-5</td>
<td>10 - 20</td>
<td>Not classified</td>
</tr>
<tr>
<td>Thiomersal (Note A)(Note 1)</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>0.1 - 1</td>
<td>Acute Tox. 2 (Inhalation), H330 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Oral), H300 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiomersal</td>
<td>(CAS-No.) 54-64-8 (EC-No.) 200-210-4 (EC Index-No.) 080-004-00-7</td>
<td>(C &gt;= 0.1) STOT RE 2, H373</td>
</tr>
</tbody>
</table>

Note A: Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as ‘... compounds’ or ‘... salts’. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Full text of H-statements: see section 16

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4.1. Description of first aid measures
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First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture
5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid sub-soil penetration. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

Storage temperature: 2 - 8 °C

7.3. Specific end use(s)

In vitro diagnostics.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Local name</th>
<th>Glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol (56-81-5)</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³)</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Hand protection:

Chemically resistant protective gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Eye protection:

Safety glasses with side shields. EN 166. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.8 - 8.2 (20 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Non oxidizing.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Protect from light.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified (No data available)</td>
</tr>
<tr>
<td>glycerol (56-81-5)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral</td>
<td>= 23000 mg/kg (Maus, male)</td>
</tr>
<tr>
<td>LC50 inhalation rat (Vapours - mg/l/4h)</td>
<td>&gt; 2.75 mg/l/4h</td>
</tr>
</tbody>
</table>
 Anti-horse IgG conjugate (100x conc.)
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecology - general: The product has not been tested.

<table>
<thead>
<tr>
<th>Compound</th>
<th>Toxicity Model</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol (56-81-5)</td>
<td>LC50 fish 1</td>
<td>54000 mg/l (96 h; Oncorhynchus mykiss)</td>
</tr>
<tr>
<td></td>
<td>EC50 Daphnia 1</td>
<td>1955 mg/l (48 h; Daphnia magna)</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

<table>
<thead>
<tr>
<th>Compound</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-horse IgG conjugate (100x conc.)</td>
<td>No additional information available.</td>
</tr>
<tr>
<td>glycerol (56-81-5)</td>
<td>Readiy biodegradable. Biodegradation 94 % (24 h)</td>
</tr>
</tbody>
</table>

**12.3. Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Compound</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-horse IgG conjugate (100x conc.)</td>
<td>No additional information available.</td>
</tr>
<tr>
<td>glycerol (56-81-5)</td>
<td>Bioaccumulation unlikely.</td>
</tr>
</tbody>
</table>

**12.4. Mobility in soil**

<table>
<thead>
<tr>
<th>Compound</th>
<th>Ecology - soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-horse IgG conjugate (100x conc.)</td>
<td>No additional information available.</td>
</tr>
<tr>
<td>glycerol (56-81-5)</td>
<td>Surface tension ≈ 63.4 mN/m (20°C)</td>
</tr>
<tr>
<td></td>
<td>Ecology - soil No additional information available.</td>
</tr>
</tbody>
</table>

**12.5. Results of PBT and vPvB assessment**

<table>
<thead>
<tr>
<th>Component</th>
<th>PBT and vPvB assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-horse IgG conjugate (100x conc.)</td>
<td>This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII</td>
</tr>
<tr>
<td></td>
<td>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII</td>
</tr>
<tr>
<td>glycerol (56-81-5)</td>
<td>This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII</td>
</tr>
<tr>
<td>Thiomersal (54-64-8)</td>
<td>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII</td>
</tr>
</tbody>
</table>

**12.6. Other adverse effects**

<table>
<thead>
<tr>
<th>Other adverse effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other adverse effects</td>
<td>No additional information available.</td>
</tr>
</tbody>
</table>

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

| Waste treatment methods | Disposal must be done according to official regulations. European waste catalogue. |
| Product/Packaging disposal recommendations | Comply with local regulations for disposal. |
Anti-horse IgG conjugate (100x conc.)
Safety Data Sheet

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user

- Overland transport
  Not applicable

- Transport by sea
  Not applicable

- Air transport
  Not applicable

- Inland waterway transport
  Not applicable

- Rail transport
  Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

18. Mercury compounds

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement on the International Transport of Dangerous Goods by Sea)
Anti-horse IgG conjugate (100x conc.)
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived-No Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Median effective concentration</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOAEC</td>
<td>No-Observed Adverse Effect Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No-Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No-Observed Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>STP</td>
<td>Sewage treatment plant</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
</tbody>
</table>

Data sources:
- Information provided by the manufacturer. MSDS of the supplier. IUCLID-Dossier from ECHA.

Department issuing data specification sheet:
- KFT Chemieservice GmbH
Im Leuschnerpark, 3  64347 Griesheim
Postfach 1451 64345 Griesheim
Germany
- Phone: +49 6155-8981-400  Fax: +49 6155 8981-500
- Safety Data Sheet Service: +49 6155 8981-522

Contact person:
- Dr. Faiza Khan

Other information:
- None.

Full text of H- and EUH-statements:

| H300   | Fatal if swallowed |
| H310   | Fatal in contact with skin |
| H330   | Fatal if inhaled |
| H373   | May cause damage to organs through prolonged or repeated exposure |
| H400   | Very toxic to aquatic life |
| H410   | Very toxic to aquatic life with long lasting effects |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

STOT RE 2

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.