


- CS** Mini Parasep® SF Koncentrátor parazitů ve stolici
- DE** Mini Parasep® SF Konzentration für Stuhlparasiten
- ES** Mini Parasep® SF Concentrador de parásitos fecales
- FR** Mini Parasep® SF Concentrateurs de Parasites Fécaux
- HR** Mini Parasep® SF Koncentrator crijevnih parazita bez otapala
- IT** Mini Parasep® SF Concentratore di parassiti fecali
- NL** Mini Parasep® SF Fecale Parasieten Concentrator
- PL** Mini Parasep® SF System do zagęszczenia kału przy analizie parazytów
- PT** Mini Parasep® SF Concentrador de parasitas fecais
- SI** Mini Parasep® SF Koncentrator parazitov v blatu


CE CE marking (European directive 98/79/CE on in vitro diagnostic medical devices)
 Označení CE (Evropská směrnice 98/79 / ES o diagnostických zdravotnických prostředcích in vitro)
 CE-Kennzeichnung (EG-Richtlinie 98/79 / EG über In-vitro-Diagnostika)
 Marcado CE (directiva europea 98/79 / CE sobre productos sanitarios para diagnóstico in vitro)
 Marquage CE (directive européenne 98/79 / CE relative aux dispositifs médicaux de diagnostic in vitro)
 CE označavanje (Europska direktiva 98/79 / EZ o in vitro dijagnostičkim medicinskim uređajima)
 Marcatura CE (Direttiva Europea 98/79 / CE relativa ai dispositivi medico-diagnostici in vitro)
 CE-markering (Europese richtlijn 98/79 / EG betreffende de in vitro diagnostische medische hulpmiddelen)
 Oznakowanie CE (dyrektywa europejska 98/79 / WE w sprawie wyrobów medycznych do diagnostyki in vitro)
 Marcação CE (directiva europeia 98/79 / CE relativa aos dispositivos médicos de diagnóstico)
 Oznaka CE (Evropska direktiva 98/79 / ES o in vitro diagnostičnih medicinskih pripomočkih)

IVD For in vitro diagnostic use
 K diagnostickému použití in vitro
 Für in-vitro-Diagnostik
 Para uso diagnóstico in vitro
 Pour diagnostic in vitro
 Za in vitro dijagnostičke svrhe
 Per uso diagnostico in vitro
 Voor in vitro diagnostisch gebruik
 Do diagnostyki in vitro
 Para uso diagnóstico in vitro
 Za in vitro diagnostično uporabo


REF Catalogue number
 Katalogové číslo
 Katalognummer
 Número de catálogo
 Numéro de catalogue
 Kataloški broj
 Numero di catalogo
 Catalogus nummer
 Numer katalogowy
 Número de catálogo
 Kataloška številka

LOT Batch code
 Kód šarže
 Loskennzeichen
 Código de lote
 Code de lot
 Serija broj
 Codice del lotto
 Batchcode
 Kod partii
 Código do lote
 Kodo serije

 Expiry date MM/YYYY
 Datum ukončení platnosti MM / YYYY
 Gültig bis MM / JJJJ
 Fecha de caducidad MM / AAAA
 Date d'expiration MM / AAAA
 Datum isteka MM / GGGG
 Data di scadenza MM / AAAA
 Vervaldatum MM / YYYY
 Termin ważności MM / YYYY
 Data de validade MM / AAAA
 Datum prenehanja veljavnosti MM / LLLL

 Storage temperature limitation
 Omezení skladovací teplota
 Lagertemperaturbegrenzung
 Límite de temperatura
 Limitation de la température de stockage
 Ograničenje temperature skladištenja
 Limitazione della temperatura di stoccaggio
 Begrenzing bewaartemperatuur
 Ograniczenie temperatury bagażu
 Limitação de temperatura de armazenamento
 Omejitev temperature za shranjevanje

 Manufacturer
 Výrobce
 Hersteller
 Fabricante
 Fabricant
 Proizvođač
 Fabbrikante
 Fabrikant
 Producent
 Fabricante
 Proizvajalec

 Consult instruction for use
 Konzultujte návod k použití
 Consult Gebrauchsanweisung
 Consulte las instrucciones de uso
 Consultez Mode d'emploi
 Posavjetujte se Naputak za primjenu
 Consultare istruzioni per l'uso
 Raadpleeg Gebruiksaanwijzing
 Skonsultuj Instrukcja użycia
 Consulte Instruções de uso
 Consult Navodila za uporabo

EN

See label for storage conditions and expiry date. Please adhere to the following guidelines when handling Mini Parasep® SF. To avoid cross contamination the Mini Parasep® SF device should remain closed at all times except when introducing the sample or when retrieving the final concentrated sample for examination.

Sample Preparation

If using prefilled Mini Parasep® SF, start at 1D

- 1A Unscrew lid.
- 1B Add 3.3ml of fixative.
- 1C Add one drop of surfactant (eg: Triton X-100) to the chamber.
- 1D Introduce a scoop of faecal sample using the spoon on the end of the Mini Parasep® SF filter. Mix in thoroughly with the Mini Parasep® SF spoon. If the sample is hard, break it up with the end of the spoon.

Emulsification

- 2 Seal Mini Parasep® SF by screwing in the filter/sedimentation cone unit. Vortex or shake to emulsify with the sedimentation cone pointing upwards.

Centrifugation

- 3 Invert Mini Parasep® SF and centrifuge at 200g for 2 minutes or 400g for 2 minutes (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Mini Parasep® SF fits all 15ml centrifuge buckets.

NOTE: To calculate the required RPM for any centrifuge

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Rotor Speed in revs/min

g centrifugal force (max. 1000g)

r radius, horizontal distance between sedimentation cone tip and spindle centre measured in mm

Examination

- 4A Unscrew and discard the filter and mixing tube.
- 4B Pour off all the liquid above the sediment.
- 4C Pipette one drop of saline or Lugol's Iodine solution onto a slide, add one drop of deposit to the saline or Lugol's Iodine, mix sample and cover with cover-slip.

CS

Podmínky skladování a expirace jsou uvedeny na nálepce. Při práci s Mini Parasep® SF dodržujte prosím následující návod. Abychom zabránili kontaminaci, musí Mini Parasep® SF koncentrátor zůstat po celou dobu uzavřený s výjimkou zavádění vzorku nebo když je koncentrovaný vzorek předán ke zkoumání.

Příprava vzorku

Při použití předplněné Mini Parasep® SF, začněte u 1D.

- 1A Odšroubujte víčko.
- 1B Přidejte 3,3 ml fixačního.
- 1C Jednu kapku surfaktantu (např. Triton X-100) do míchacího prostoru.
- 1D Zavést kopeček vzorek stolice pomocí lžice na konci filtru Mini Parasep® SF. Vmícháme důkladně lžící Mini Parasep® SF. V případě, že vzorek je těžké, rozdělit to s koncem lžice.

Emulgace

- 2 Filtrační díl pevně sešroubujte dohromady se zásobníkem roztoku a krátce promíchejte.

Centrifugace

- 3 Vložte do centrifugy a centrifugujte při 200 g po dobu 2 minut nebo 400 g po dobu 2 minut (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Pro Mini Parasep® SF můžete použít všechny 15 ml adaptéry.

Poznámka: Pro výpočet RPM použijte následující vzorec

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Otáčky rotoru

g Odstředivá síla centrifugy (max.1000g)

r Rádus, horizontální vzdálenost mezi koncem sedimentační zkumavky a středem osy, měřeno v mm

Zkoumání vzorku

- 4A Vyjměte Mini Parasep® SF, odšroubujte filtrační díl a zlikvidujte (tento díl zůstává uzavřen).
- 4B Vylijte veškerou kapalinu nad usazeninou.
- 4C Napipetujte jednu kapku fyziologického roztoku nebo Lugolův roztok jodu na snímku, přidejte jednu kapku vkladu do fyziologického roztoku nebo Lugolův jodu, smíchejte vzorek a zakryjte krycí sklíčko.

DE

Haltbarkeit und Aufbewahrung : Siehe Packungsaufdruck
Bitte beim Verwenden von Mini Parasep® SF die nachfolgenden Anweisungen beachten. Um Kreuz-kontamination zu vermeiden, sollte das Mini Parasep® SF Röhrchen, außer bei Probenzugabe und Entnahme des Sediments zur mikroskopischen Untersuchung, immer verschlossen bleiben.

Probenvorbereitung

Bei der Verwendung von vorgefüllten Mini Parasep® SF bei 1D beginnen.

- 1A Deckel abschrauben.
- 1B 3,3ml Fixierlösung zugeben.
- 1C Triton X-100 (1:20 Verdünnung) zugeben.
- 1D Mit dem Löffel am Mini Parasep® SF Filter eine Portion der Kotprobe zugeben. Mit dem Mini Parasep® SF Löffel gut mischen. Bei harten Stuhlproben mit dem Löffel zerdrücken.

Emulgieren

- 2 Den Filterteil mit dem Sedimentationsröhrchen des Mini Parasep® SF mit dem Probenröhrchen fest zusammenschrauben. Die Probe gut mischen mittels Vortexmischer bzw. kräftig schütteln, bis eine homogene Emulsion entsteht. Es ist wichtig, daß der Konusboden des Sedimentationsröhrchen nach oben zeigt.

Zentrifugation

- 3 Mini Parasep® SF mit dem konusförmigen, spitz zulaufenden Teil nach unten in die Zentrifuge stellen. 2 Minuten bei 200xg zentrifugieren oder 2 Minuten bei 400xg zentrifugieren (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Mini Parasep® SF passt in all gängigen 15ml Zentrifugenröhrchen-Aufsätze.

RPM-Berechnung für all gängigen Zentrifugen

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Rotordrehzahl in Umdrehungen/min

g Zentrifugalkraft (max 1000g)

r Radius, Abstand zw. dem unteren Ende des konischen Röhrchen und der Zentrifugenspindel, in mm

Probenuntersuchung

- 4A Mini Parasep® SF aufdrehen und den Filterteil entsorgen (dieser Teil sollte beim Aufdrehen verschlossen bleiben).
- 4B Den Überstand vorsichtig abgießen.
- 4C 1 Tropfen NaCl bzw. Lugol's Jod-Lösung auf einen Objektträger träufeln. 1 Tropfen des Sediments dazugeben, mischen und mit einem Deckglas zudecken.

ES

Mirar la etiqueta para ver condiciones de almacenaje y fecha caducidad. Cuando se manipule Mini Parasep® SF se ruega seguir las instrucciones. Para evitar contaminaciones cruzadas el Mini Parasep® SF ha de permanecer siempre cerrado, excepto cuando se introduce la muestra o cuando se extrae la preparación final con objeto de ser examinada.

Preparación de la muestra

Si utiliza Mini Parasep® SF prellenado, comience en 1D.

- 1A Desenroscar el tapón.
- 1B Añadir 3.3 ml de fijador.
- 1C Si se requiere una gota de surfactante (Triton X-100) para emulsionar.
- 1D Introducir una cucharada de muestra de heces utilizando la cuchara que se encuentra al final del filtro del dispositivo Mini Parasep® SF. Agitar vigorosamente con la cuchara del dispositivo Mini Parasep® SF. Si la muestra es de consistencia dura, trocearla con la punta de la cuchara.

Emulsionado

- 2 Enroscar la cámara de mezcla con la unidad de filtro/cono de sedimentación. Vortear o agitar para emulsionar con el cono de sedimentación hacia arriba.

Centrifugación

- 3 Invertir el Mini Parasep® SF y centrifugar a 200g durante 2 minutos o 400g durante 2 minutos (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). El Mini Parasep® SF se adecúa a todas las cestas de centrifugación de 15 ml.

Nota: Para calcular la RPM requeridas para cualquier centrifuga

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Velocidad del rotor

g Fuerza centrífuga (max 1000g)

r Radio, distancia entre la punta del cono y el centro del rotor medida en mm.

Examen

- 4A Desenrosque y elimine la cámara de mezcla junto con el filtro.
- 4B Decante el líquido sobrenadante del sedimento.
- 4C Dispensar una gota de solución salina o solución de yodo-lugol, mezclar con la muestra y cubrir con un cubre-objetos.

FR

Voir étiquette pour stockage et date d'expiration.

Respectez les consignes suivantes lorsque vous manipulez le Midi Parasep®. Pour éviter la contamination croisée, le Mini Parasep® SF devrait rester fermé, sauf lors de la saisie de l'échantillon ou quand vous prenez l'échantillon concentré final pour l'examen.

Préparation de l'échantillon

Si vous utilisez Mini Parasep® SF pré-remplie, commencer à 1D.

- 1A Dévissez le bouchon.
- 1B Ajoutez 3,3ml de fixateur.
- 1C Et ajoutez une goutte de surfactant (par ex: Triton X-100) pour émulsifier.
- 1D Introduire un scoop de l'échantillon fécal en utilisant la cuillère à l'extrémité du filtre Mini Parasep® SF. Mélanger soigneusement avec la cuillère Mini Parasep® SF. Si l'échantillon est trop dur, rompre avec la fin de la cuillère.

Émulsification

- 2 Scellez le Mini Parasep® SF en le vissant dans le compartiment de cône de filtrage. Tourbillonnez ou secouez pour émulsionner avec le cône de sédimentation pointé vers le haut.

Centrifugation

- 3 Retournez le Mini Parasep® SF et centrifugez le à 200g pendant 2 minutes ou 400g pendant 2 minutes (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Mini Parasep® SF s'adapte à tous les seaux de centrifugeuses 15ml.

RAPPEL: Calcul du nombre de tours par minute en fonction du rayon de la centrifugeuse.

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM tours par minute.

g accélération (max.1000g)

r rayon de la centrifugeuse en mm (depuis l'axe central jusqu'à la pointe du cône)

Examination

- 4A Dévissez et jetez le filtre et le tube de mélange.
- 4B Décantez tout le liquide au-dessus du sédiment.
- 4C Déposez une goutte de sérum physiologique ou de solution d'iode de Lugol sur une lame, ajoutez une goutte de sédiment à la solution saline ou iodisée, mélangez l'échantillon et couvrez avec couvre-lamelle.

HR

Pogledajte naljepnicu za uvjete čuvanja i rok valjanosti.

Molimo pridržavajte se sljedećih smjernica prilikom rukovanja Midi Parasep®-om. Kako biste izbjegli kros-kontaminaciju Mini Parasep® SF bi trebao biti zatvoren cijelo vrijeme osim kada stavljate uzorak ili prilikom uzimanja krajnjeg koncentriranog uzorka za mikroskopiranje.

Priprema Uzorka

Ako koristite napunjenu Mini Parasep® SF, započeti u 1D.

- 1A Otvorite poklopac.
- 1B Dodajte 3,3 ml fiksatora.
- 1C Dodajte Triton X u komoru za miješanje.
- 1D Uzmite žličicu uzorka koristeći žličicu na kraju Mini Parasep® SF filtera. Dobro promiješajte s Mini Parasep® SF žličicom. Ako je uzorak tvrd, razbijte ga s krajem žličice.

Emulgiranje

- 2 Zatvorite Mini Parasep® SF tako da umetnete filter / sedimentacijski konus. Vorteksirajte ili protresite kako bi emulgirali sa sedimentacijskim konusom prema gore.

Centrifugiranje

- 3 Okrenite Mini Parasep® SF i centrifugirajte na 200g 2 minute ili 400g 2 minute (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Mini Parasep® SF odgovara svim 15 ml adapterima za centrifuge.

NAPOMENA: Preračunavanje RPM Za Svaku Centrifugu

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM brzina rotora u okr./min.

g centrifugalna sila (max. 1000g)

r radijus, horizontalna udaljenost između sedimentacijskog konusa i centra vrtnje mjerena u mm

Pregled

- 4A Otvorite i bacite filter i komoru za miješanje.
- 4B Odlijte svu tekućinu iznad sedimenta.
- 4C Otpipetirajte jednu kap fiziološke otopine ili lugolove otopine na stakalce, dodajte jednu kap depozita u fiziološku ili lugolovu otopinu na stakalcu, promiješajte uzorak i pokrijte pokrovnim stakalcem.

IT

Leggere le indicazioni dell'etichetta su conservazione e data di scadenza. Si prega di seguire le seguenti avvertenze quando si utilizza il kit Mini Parasep® SF. Per evitare cross-contaminazioni il concentratore Mini Parasep® SF dovrebbe rimanere sempre chiuso tranne quando si debba introdurre il campione o quando debba essere recuperato il campione dopo la concentrazione (sedimento) per la successiva analisi.

Preparazione del campione

Se si utilizza Mini Parasep® SF preriempito, iniziare dal punto 1D.

- 1A Svitare il tappo.
- 1B Aggiungere 3.3 ml di fissativo.
- 1C Se richiesto, aggiungere una goccia di surfattante (es. Triton X-100) per emulsionare.
- 1D Introdurre un campione fecale della dimensione di un pisello usando il cucchiaio all'estremità del filtro Mini Parasep® SF. Mescolare bene con il cucchiaio. Se il campione è duro, romperlo con l'estremità del cucchiaio.

Omogenizzazione

- 2 Chiudere ermeticamente il Mini Parasep® SF avvitando sul flacone di raccolta il cono di sedimentazione connesso con il filtro. Agitare a mano o con il vortex con il cono di sedimentazione rivolto verso l'alto.

Centrifugazione

- 3 Invertire il Mini Parasep® SF e centrifugare a 200g per 2 minuti o 400g per 2 minuti (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Il Mini Parasep® SF si adatta a tutte le centrifughe con rotori per provette da 15 ml.

Nota: per tutti i tipi di centrifuga la conversione da g a RPM avviene tramite questa formula:

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Velocità del rotore in giri/ minuto

g Forza centrifuga (massimo 1000g)

r Raggio, distanza orizzontale tra la punta del cono di sedimentazione e il centro del rotore misurato in mm

Esame del campione

- 4A Svitare la camera di miscelazione annessa al filtro ed eliminarla.
- 4B Eliminare il sovrantante.
- 4C Pipettare una goccia di soluzione salina o iodina di Lugol sul vetrino, aggiungere una goccia di deposito sulla soluzione, mescolare il campione e coprirlo.

NL

Zie etiket voor bewaring en vervaldatum. Houdt u aan de volgende richtlijnen bij het omgaan met Mini Parasep® SF. Om kruisbesmetting te voorkomen, moet de Mini Parasep® SF altijd gesloten blijven, behalve bij het invoeren van het staal of bij het ophalen van het definitieve geconcentreerde staal voor onderzoek.

Staalvoorbereiding

Bij gebruik van voorgevulde Mini Parasep® SF, beginnen bij 1D.

- 1A Schroeft u het deksel los.
- 1B Voeg 3,3 ml fixatief toe.
- 1C Voegt een druppel surfactant (bv. Triton X-100) om te emulgeren.
- 1D Breng een kleine hoeveelheid feces monster in de monsterbuis met behulp van de lepel aan het uiteinde van de Mini Parasep® SF filter. Meng grondig met de Mini Parasep® SF lepel. Als het monster hard is, breek het dan open met de lepel.

Emulsificatie

- 2 Sluit de Mini Parasep® SF af door de filter unit in de sedimentatie kegel te schroeven. Schud met de sedimentatie kegel naar boven gericht om te emulgeren.

Centrifugatie

- 3 Keer de Mini Parasep® SF om en centrifugeer aan 200g gedurende twee minuten of 400g gedurende twee minuten (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Mini Parasep® SF past op alle 15 ml centrifuges.

Voor het berekenen van de benodigde RPM voor een centrifuge

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Rotor snelheid in toeren per minuut

g Centrifugale kracht (maximaal 1000g)

r Radius, horizontale afstand tussen centrum van de centrifuge en de tip van de buis, gemeten in mm.

Onderzoek

- 4A Schroef los en gooi de mengkamer en filter weg.
- 4B Giet alle vloeistof weg die zich boven het sediment bevindt.
- 4C Pipeteer één druppel saline of Lugol's Iodine oplossing op een objectglaasje, voeg één druppel sediment toe aan de saline of Lugol's Iodine, meng het monster en dek af een dekglaasje.

PL

Warunki przechowywania oraz data ważności zestawu na etykiecie. Proszę uważnie przeczytać instrukcję wykonania oznaczenia (Mini Parasep® SF) a następnie postępować z jej zaleceniami. Aby uniknąć przypadkowego zanieczyszczenia fiolka powinna być zamknięta przez cały czas przechowywania. Fiolkę Mini Parasep® SF otwieramy podczas pobierania próbki oraz podczas analizy zatężonego materiału biologicznego.

Przygotowanie próbki

Jeśli używasz 'prefilled' Mini Parasep® SF, zacznij od 1D.

- 1A Otworzyć probówkę a następnie.
- 1B Dodaj 3.3ml utrwalacza.
- 1C Oraz 1 kroplę surfaktantu (np. Triton X-100).
- 1D Pobierz próbkę kału wielkości ziarna grochu na łyżeczkę zintegrowaną z filtrami probówki Mini Parasep® SF. Wymieszaj dokładnie próbkę w probówce Mini Parasep® SF. Jeśli próbka jest zbyt twarda, rozdrobnij ją końcem łyżeczki.

Przygotowanie emulsji

- 2 Połączyć ze sobą dwie części probówki Mini Parasep® SF (1: część wirówkowa probówki zaopatrzona w łopatkę oraz filtr; 2 część probówki z roztworem oraz materiałem biologicznym). Dokładnie wymieszać zawartość probówki (część stożkowa powinna być skierowana ku górze).

Wirowanie

- 3 Probówkę Mini Parasep® SF wirować przy 200 g przez 2 minut lub 400 g przez 2 minut (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Mini Parasep® SF pasuje do wszystkich 15ml wiadra wirówki.

UWAGA: Dla każdej wirówki należy obliczyć prędkość wirowania.

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Prędkość wirowania (obrotów/min)

g siła odśrodkowa (maksimum 1000g)

r Promień ramienia rotora

Pobranie przygotowanej próbki do badań

- 4A Część stożkowa zawiera przygotowany do badań materiał. Drugą część probówki (część filtrującą) zawierającą zanieczyszczenia należy zutylizować.
- 4B Następnie ostrożnie zlać nadszyc (materiał nie związany w osadzie oraz płyn pozostający nad osadem).
- 4C Umieść jedną kroplę soli fizjologicznej lub płynu Lugola na szkiełku podstawowym. Dodaj jedną kroplę zagęszczonego materiału do soli fizjologicznej lub płynu Lugola na szkiełku, wymieszaj próbkę i przykryj szkiełkiem nakrywkowym.

PT

Veja as condições de armazenamento e a data de validade na etiqueta. Quando manusear o Mini Parasep® SF deve seguir as instruções de utilização. Para evitar contaminações cruzadas o Mini Parasep® SF deve permanecer sempre fechado, excepto quando introduz a amostra ou quando extrai a preparação final para ser examinada.

Preparação da amostra

Se estiver a utilizar o Mini Parasep® SF pré-cheio, comece em 1D.

- 1A Desenroscar a tampa.
- 1B Adicione 3,3ml de fixador.
- 1C Se necessário uma gota de surfactante (Triton X-100) para emulsionar.
- 1D Introduza uma colher de amostra de fezes utilizando a colher no fim do filtro do Mini Parasep® SF. Misture cuidadosamente com a colher Mini Parasep® SF. Se a amostra for dura, parta-a com a ponta da colher.

Emulsão

- 2 Enroskar a câmara de mistura com a unidade de filtro/cone de sedimentação. Agitar no vortex para emulsionar com o cone de sedimentação apontando para cima.

Centrifugação

- 3 Inverter o Mini Parasep® SF e centrifugar a 200g por 2 minutos ou 400g por 2 minutos (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Mini Parasep® SF é adequado a todos os copos de centrifuga de 15ml.

Nota: Para calcular as RPM para qualquer centrifuga

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Velocidade do rotor

g Força centrífuga (máximo 1000g)

r Raio, distância entre a ponta do cone e o centro do rotor medida em mm

Visualização

- 4A Desenrosque e elimine a câmara de mistura juntamente com o filtro.
- 4B Decante o liquido sobrenadante do sedimento.
- 4C Pipete uma gota de solução salina ou de solução Iodada de Lugol para uma lâmina, adicione uma gota do depósito na solução salina ou solução Iodada de Lugol, misture a amostra e cubra com uma lamela.

SI

Shranjevanje in rok uporabe: glej nalepko!

Prosimo, da pri uporabi koncentradorja Mini Parasep® SF upoštevate naslednja priporočila. Koncentrador Mini Parasep® SF naj bo vedno zaprt. Odprite ga samo med dodajanjem vzorca blata in odvzemom koncentriranega vzorca za mikroskopsko analizo. S tem preprečite navzkrižno kontaminacijo.

Priprava vzorca

(V primeru, da uporabljate pripravljene koncentradorje, napolnjene z reagenti, začnete pri točki 1D)

- 1A Odvijte zamašek koncentradorja.
- 1B Dodajte 3,3 ml fiksativa.
- 1C Ter 1 kapljico surfaktanta (npr. Triton-X-100).
- 1D Z žličko na koncu Mini Parasep® SF filter epruvete dodajte vzorec blata v velikosti manjše kepice. Temeljito premešajte z Mini Parasep® SF žličko. Če je vzorec pretrd, ga s konico žličke razdrobite.

Emulzifikacija

- 2 Koncentrador tesno zaprite in ga premešajte ročno ali z vortexom. Filtrirni del z vzorcem naj bo pri tem obrnjen navzdol.

Centrifugiranje

- 3 Koncentrador obrnite in ga centrifugirajte 2 minuti pri 200g ali 2 minuti pri 400g (J. Clin. Microbiol. doi:10.1128/JCM.00838-15). Koncentrador ustreza vsem 15 ml nastavkom v centrifugah.

Opomba: Za izračun potrebne hitrosti (obrati na minuto), lahko za katerokoli centrifugo, uporabite naslednjo formulo

$$\text{RPM} = \sqrt{\frac{g}{1.12r}} \times 1000$$

RPM Hitrost rotorja v obratih na minuto

g Centrifugalna sila (maks. 1000g)

r polmer, razdalja med konico koncentradorja in osjo rotorja, merjena v mm

Pregled vzorca

- 4A Filtrirni del koncentradorja odvijte in zavrzite.
- 4B Vso tekočino nad sedimentom odlijte.
- 4C Na objektno stekelce kapnite eno kapljico fiziološke ali lugol jodove raztopine, dodajte eno kapljico sedimenta, vzorec premešajte in pokrijte s krovnim stekelcem.



ALCORFIX™ SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: AlcorFix™

148885, 148886, 148887, 148889, 148962, 149980, 149995, 248200, 248930, 249200, 249300, 249420

1.2 Relevant identified uses of the substance or mixture and uses advised against: Solution for fixation/conservation of biological samples.

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England
+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (gas) (Category 4), H332

Serious eye damage (Category 1), H318

Hazardous to the aquatic environment (Category 2), H411

Flammable liquids (Category 2), H225

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

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



Pictogram

Signal word

Danger

Hazard statement(s)

H225 – Highly flammable liquid and vapour

H302 - Harmful if swallowed

H318 - Causes serious eye damage

H332 - Harmful if inhaled

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P370 + P378 - In case of fire: Use dry sand, carbon dioxide (CO₂), water spray, dry chemical or alcohol resistant foam to extinguish.

2.3 Other hazards

None.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Ethanol**

CAS No: 64-17-5

EC No: 200-578-6

Index No: 603-002-00-5

Classification: Flam. Liq. 2 (H225)

Concentration: 25%

Component: **Zinc sulphate**

CAS No: 7733-02-0

EC No: 231-793-3

Index No: 030-006-00-9

Classification: Acute Tox. 4 (H302), Eye Dam. 1 (H318), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410)

Concentration: 7.9%

Component: **Acetic Acid**

CAS No: 64-19-7

EC No: 200-580-7

Index No: 607-002-00-6

Classification: Skin Corr. 1A (H314), Flam. Liq. 3 (H226)

Concentration: 4.8%

Component: **Isopropanol**

CAS No: 67-63-0

EC No: 200-661-7

Index No: 603-117-00-0

Classification: Eye Irrit. 2 (H319), STOT SE 3 (H336), Flam. Liq. 2 (H225)

Concentration: 1%

Component: **Methyl Alcohol**

CAS No: 67-56-1

EC No: 200-659-6

Index No: 603-001-00-X

Classification: Acute Tox. 3 (H301), Acute Tox. 3 (H311), Acute Tox 3. (H331), STOT SE 1 (H370), Flam. Liq. 2 (H225)

Concentration: 1%

3.3 Other Information

Additional non-hazardous ingredients:

Polyvinyl alcohol (minimum 1g/l)

DI water

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.



ALCORFIX™ SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

If swallowed: Clean mouth with water and drink afterwards plenty of water.

If inhaled: Move to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media (use media appropriate to the circumstances and environment): dry sand, carbon dioxide (CO₂), water spray, alcohol-resistant foam, dry chemical.

5.2 Special hazards arising from the substance or mixture

No information available

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

Should not be released into the environment. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Absorb spill with inert material (eg dry sand or earth), then place in a chemical waste container. After cleaning, flush away traces with water.

6.4 Reference to other sections

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not breathe vapours or spray mist. Ensure that ventilation is adequate before using this product. Avoid contact with skin and eyes. Take necessary personal protective precautions before using this product. Keep away from heat and flame. Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Incompatible products: Avoid strong bases. Oxidizing agent.

7.3 Specific end use(s)

No other specific end uses(s) are specified apart from those listed in Section 1.2.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Component	Ethanol 64-17-5	Zinc sulphate 7733-02-0	Acetic Acid 64-19-7	Isopropanol 67-63-0	Methyl Alcohol 67-56-1
UK	STEL: 3000 ppm STEL: 5760 mg/m ³ TWA: 1000 ppm TWA: 1920 mg/m ³			STEL: 500 ppm STEL: 1250 mg/m ³ TWA: 400 ppm TWA: 999 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³ Skin
France	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³		STEL: 10 ppm STEL: 25 mg/m ³	STEL: 400 ppm STEL: 980 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 1000 ppm STEL: 1300 mg/m ³
Spain	STEL: 1000 ppm STEL: 1910 mg/m ³		STEL: 15 ppm STEL: 37 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³	STEL: 400 ppm STEL: 1000 mg/m ³ TWA: 200 ppm TWA: 500 mg/m ³	S* TWA: 200 ppm TWA: 266 mg/m ³
Germany	TWA: 500 ppm TWA: 960 mg/m ³ Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m ³ Skin	TWA: 0.1 mg/m ³ TWA: 2 mg/m ³ Ceiling / Peak: 0.4 mg/m ³ Ceiling / Peak: 4 mg/m ³	TWA: 10 ppm TWA: 25 mg/m ³ Ceiling / Peak: 20 ppm Ceiling / Peak: 50 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ Ceiling / Peak: 400 ppm Ceiling / Peak: 1000 mg/m ³	TWA: 200 ppm TWA: 270 mg/m ³ Ceiling / Peak: 800 ppm Ceiling / Peak: 1080 mg/m ³ Skin TWA: 200 ppm TWA: 260 mg/m ³ Skin
Italy					TWA: 200 ppm TWA: 260 mg/m ³ Skin
Portugal	TWA: 1000 ppm		STEL: 15 ppm TWA: 10 ppm TWA: 25 mg/m ³	STEL: 400 ppm TWA: 200 ppm	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m ³
The Netherlands	Skin STEL: 1900 mg/m ³ TWA: 260 mg/m ³				Skin TWA: 133 mg/m ³ TWA: 100 ppm
Finland	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 1300 ppm STEL: 2500 mg/m ³		TWA: 5 ppm TWA: 13 mg/m ³ STEL: 10 ppm STEL: 25 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 620 mg/m ³	TWA: 200 ppm TWA: 270 mg/m ³ STEL: 250 ppm STEL: 330 mg/m ³ Skin
Denmark	TWA: 1000 ppm TWA: 1900 mg/m ³		TWA: 10 ppm TWA: 25 mg/m ³	TWA: 200 ppm TWA: 490 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³ Skin
Austria	STEL 2000 ppm STEL 3800 mg/m ³ TWA: 1000 ppm TWA: 1900 mg/m ³		STEL 20 ppm STEL 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³	STEL 800 ppm STEL 2000 mg/m ³ TWA: 200 ppm TWA: 500 mg/m ³	Skin STEL 800 ppm STEL 1040 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
Switzerland	STEL: 1000 ppm STEL: 1920 mg/m ³ TWA: 500 ppm TWA: 960 mg/m ³	STEL: 4 mg/m ³ TWA: 0.1 mg/m ³ TWA: 2 mg/m ³	STEL: 20 ppm STEL: 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³	STEL: 400 ppm STEL: 1000 mg/m ³ TWA: 200 ppm TWA: 500 mg/m ³	Skin STEL: 800 ppm STEL: 1040 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
Poland	TWA: 1900 mg/m ³		STEL: 30 mg/m ³ TWA: 15 mg/m ³	STEL: 1200 mg/m ³ TWA: 900 mg/m ³	STEL: 300 mg/m ³ TWA: 100 mg/m ³
Norway	TWA: 500 ppm TWA: 950 mg/m ³ STEL: 500 ppm STEL: 950 mg/m ³		TWA: 10 ppm TWA: 25 mg/m ³ STEL: 20 ppm STEL: 37.5 mg/m ³	TWA: 100 ppm TWA: 245 mg/m ³ STEL: 150 ppm STEL: 306.25 mg/m ³	TWA: 100 ppm TWA: 130 mg/m ³ Skin STEL: 150 ppm STEL: 162.5 mg/m ³
Ireland	STEL: 1000 ppm		TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	TWA: 200 ppm STEL: 400 ppm Skin	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 600 ppm STEL: 780 mg/m ³ Skin
European Union			TWA 10 ppm TWA 25 mg/m ³		TWA: 200 ppm TWA: 260 mg/m ³ Skin

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure controls

Engineering measures: Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection: No special protective equipment required.

Hand protection: Wear appropriate protective gloves.

Eye protection: Wear tightly fitting safety goggles or safety glasses with side-shields.

Skin and body protection: Protective clothing to protect exposed skin.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls: No information available.



ALCORFIX™ SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) **Appearance:** clear liquid
- b) **Odour:** pungent
- c) **Odour threshold:** no information available
- d) **pH:** no information available
- e) **Melting point / freezing point:** no information available
- f) **Initial boiling point / boiling range:** 84°C
- g) **Flash point:** 16°C
- h) **Evaporation rate:** no information available
- i) **Flammability (solid, gas):** no information available
- j) **Upper/lower flammability or explosive limits:** no information available
- k) **Vapour pressure:** no information available
- l) **Vapour density:** no information available
- m) **Relative density:** no information available
- n) **Solubility (ies) :** soluble in water
- o) **Partition coefficient: n-octanol/water:** no information available
- p) **Auto-ignition temperature:** no information available
- q) **Decomposition temperature:** no information available
- r) **Viscosity:** no information available
- s) **Explosive properties:** no information available
- t) **Oxidising properties:** no information available

9.2 Other information:

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

No particular materials.

10.6 Hazardous decomposition products

Under normal use – none.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity:

Product: based on known/supplied information, does not present an acute toxicity hazard.

Inhalation: no data available.

Eye contact: no data available.

Skin contact: no data available.

Ingestion: no data available.

≤ 60.3% of the mixture consists of ingredients of unknown toxicity.

The following values are calculated based on GHS document chapter 3.1.

Oral	1,363.00mg/kg
Dermal	5,158.00mg/kg
Inhalation:	Gas 4,263.00mg/l
	Mist 20.90mg/l
	Vapour 829.22mg/l

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol	7060mg/kg (Rat)		124.7mg/L (Rat) 4 h
Zinc sulphate	500mg/kg (Rat)		
Acetic acid	3310mg/kg (Rat)	1060mg/kg (Rabbit)	11.4mg/L (Rat) 4 h
Methyl alcohol	6200mg/kg (Rat)	15800mg/kg (Rabbit)	22500 ppm (Rat) 8 h 64000 ppm (Rat) 4 h
Isopropanol	1870mg/kg (Rat)	4059mg/kg (Rabbit)	72600mg/m3 (Rat) 4 h

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and other aquatic invertebrates
Ethanol		12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
Zinc sulphate	0.056: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 64.8: 72 h Chlorella vulgaris mg/L EC50 2.4: 96 h Chlorella vulgaris mg/L EC50	0.162: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.05: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.34 - 0.93: 96 h Oncorhynchus mykiss mg/L LC50 static 0.218 - 0.42: 96 h Pimephales promelas mg/L LC50 flow-through 0.06: 96 h Pimephales promelas mg/L LC50 static 0.23 - 0.48: 96 h Pimephales promelas mg/L LC50 0.168 - 0.25: 96 h Pimephales promelas mg/L LC50 semi-static 0.15: 96 h Cyprinus carpio mg/L LC50 semi-static 16.85 - 27.18: 96 h Cyprinus carpio mg/L LC50 static 3 - 4.6: 96 h Lepomis macrochirus mg/L LC50 flow-through 3.55 - 6.32: 96 h Lepomis macrochirus mg/L LC50 static 0.63: 96 h Poecilia reticulata mg/L LC50 49.23 - 64.16: 96 h Poecilia reticulata mg/L LC50 semi-static 0.48 - 1.72: 96 h Poecilia reticulata mg/L LC50 static	0.75: 48 h Daphnia magna mg/L EC50 0.538 - 0.908: 48 h Daphnia magna mg/L EC50 Static
Acetic acid		79: 96 h Pimephales promelas mg/L LC50 static 75: 96 h Lepomis macrochirus mg/L LC50 static	65: 48 h Daphnia magna mg/L EC50 Static 47: 24 h Daphnia magna mg/L EC50
Isopropanol	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50	13299: 48 h Daphnia magna mg/L EC50
Methyl alcohol		28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through	



ALCORFIX™ SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

Chemical Name	log Pow
Ethanol	-0.32
Acetic acid	-0.31
Isopropanol	0.05
Methyl alcohol	-0.77

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

12.7 Additional information

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues / unused products: In accordance with local and national regulations. Should not be released into the environment.

Contaminated packaging: Empty containers should be disposed of at an approved waste handling site for recycling or disposal.

SECTION 14 TRANSPORT INFORMATION

14.1 UN number: UN2924

14.2 UN proper shipping name: Flammable Liquid, Corrosive, n.o.s. (Ethanol, Acetic Acid)

14.3 Transport hazard class(es): 3, Subsidiary Class: 8

14.4 Packing group: II

14.5 Environmental hazards

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

Note: Per 49 CFR – when shipping 30ml or less per inner packaging and the gross weight does not exceed 64lbs, use the 173.4 small quantity exception.

SECTION 15 REGULATORY INFORMATION

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

Chemical Name	French RG number
Ethanol	RG 84
Isopropanol	RG 84
Methyl alcohol	RG 84

TSCA	Complies
EINECS/ELINCS	-
DSL/NDSL	-
PICCS	-
ENCS	-
IECSC	-
AICS	-
KECL	-

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 AICS - Australian Inventory of Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical Safety Assessment

No information available

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H225 - Highly flammable liquid and vapour

H226 - Flammable liquid and vapour

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

H370 - Causes damage to organs.

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

Amended sections are indicated by a line in the border.

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



BAILENGER SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: Bailenger

145650, 146650

1.2 Relevant identified uses of the substance or mixture and uses advised against: for laboratory use (in vitro diagnostic).

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England
+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Constituents are classified as non-dangerous according to Regulation (EC) No 1272/2008 [CLP].

2.2 Label elements

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

Hazard statement(s)

-

Precautionary statements:

-

2.3 Other hazards

Not classified as PBT/vPvB by current EU criteria.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Acetic Acid**

CAS No: 64-19-7

EC No: 200-580-7

Index No: -

Registration No: -

Classification: Skin Corr. 1A (H314), Flam. Liq 3 (H226)

Concentration: < 1%

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Rinse mouth thoroughly with plenty of water

and consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

-

4.3 Indication of any immediate medical attention and special treatment needed

-

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use dry powder, or carbon dioxide. Use extinguishing media appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture

None.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

-

6.2 Environmental precautions

Avoid contamination of sewers, surface water, groundwater and soil.

6.3 Methods and material for containment and cleaning up

Absorb with earth, sand or other non-combustible material and place in containers for disposal according to local regulations (see Section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal, see Section 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear protective gloves and appropriate protective clothing. Avoid contact with skin and eyes. Wash hands and other exposed areas before eating, drinking or smoking.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed; store in a cool, dry, well-ventilated place.

7.3 Specific end use(s)

No other specific uses are specified apart from those listed in Section 1.2.



BAILINGER SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Acetic Acid 64-19-7	
Austria	STEL: 20 ppm STEL: 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Belgium	STEL: 15 ppm STEL: 38 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Denmark	STEL: 20 ppm STEL: 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
France	STEL: 10 ppm STEL: 25 mg/m ³
Germany	STEL: 20 ppm STEL: 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Ireland	STEL: 15 ppm STEL: 37 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Italy	TWA: 10 ppm TWA: 25 mg/m ³
Poland	STEL: 30 mg/m ³ TWA: 15 mg/m ³
Portugal	STEL: 15 ppm TWA: 10 ppm TWA: 25 mg/m ³
Spain	STEL: 15 ppm STEL: 37 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Sweden	STEL: 10 ppm STEL: 25 mg/m ³ TWA: 5 ppm TWA: 13 mg/m ³
The Netherlands	
UK	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: -

8.2.3 Environmental exposure controls

-

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) **Appearance** Form: colourless liquid
- b) **Odour** characteristic of acetic acid
- c) **Odour threshold** no data available
- d) **pH** 5.0 ± 0.5 at 20°C
- e) **Melting point / freezing point** no data available
- f) **Initial boiling point and boiling range** no data available
- g) **Flash point** no data available
- h) **Evaporation rate** no data available
- i) **Flammability (solid, gas)** no data available
- j) **Upper/lower flammability or explosive limits** no data available
- k) **Vapour pressure** no data available
- l) **Vapour density** no data available
- m) **Relative density** no data available
- n) **Solubility (ies)** no data available
- o) **Partition coefficient: n-octanol/water** no data available
- p) **Auto-ignition temperature** no data available
- q) **Decomposition temperature** no data available
- r) **Viscosity** no data available
- s) **Explosive properties** no data available
- t) **Oxidising properties** no data available

9.2 Other information

No data available.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Direct sunlight.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available



BAILINGER SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

Carcinogenicity: IARC: no component of this product present at levels greater than 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information

Chemical Name	
Acetic Acid	LD50 oral 3310 mg/kg (Rat) LD50 dermal 1060 mg/kg (Rabbit) LC50 inhalation 11.4 mg/L (Rat) 4 h

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Toxicity to Fish	
Acetic Acid	75: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Pimephales promelas mg/L LC50 static

Toxicity to Daphnia and other Aquatic Invertebrates	
Acetic Acid	47: 24 h Daphnia magna mg/L EC50 65: 48 h Daphnia magna mg/L EC50 Static

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

Chemical Name	log Pow
Acetic Acid	0

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

No data available.

12.7 Additional information

Avoid discarding in the environment.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: This material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

SECTION 14 TRANSPORT INFORMATION

14.1 UN number: -

14.2 UN proper shipping name Not dangerous goods

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15 REGULATORY INFORMATION

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

No data available.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to in Sections 2 and 3

Flam. Liq. Flammable liquids

H226 Flammable liquid and vapour

H314 Causes severe skin burns and eye damage

Skin Corr. Skin corrosion

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



ETHYL ACETATE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: Ethyl Acetate

145400, 145420, 145501, 145650, 145750, 145900, 146400, 146501, 146650, 146750, 1473

Synonyms, Trade Names: ETHYL ACETATE 98 - 100%, ACETIC ACID ETHYL ESTER, ACETOXYETHANE

REACH Registration Number: 01-2119475103-46-XXXX

CAS-No: 141-78-6

EU Index No: 607-022-00-5

EC No: 205-500-4

1.2 Relevant identified uses of the substance or mixture and uses advised against: laboratory chemical for the removal of fat from faecal samples.

1.3 Details of the supplier of the Safety Data Sheet: Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England

+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Flam. Liq. 2 - H225

STOT SE 3 - H336

Eye Irrit. 2 - H319

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

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



Pictogram

Signal word

Danger

Hazard Statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261 Avoid breathing vapour/spray.

P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with national regulations.

Supplemental Label Information

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

Not classified as PBT/vPvB by current EU criteria.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Hazardous ingredients according to Regulation (EC) No 1272/2008

Product Name: ETHYL ACETATE

REACH Registration Number: 01-2119475103-46-XXXX

CAS-No: 141-78-6

EU Index No: 607-022-00-5

EC No: 205-500-4

Composition Comments: The data shown are in accordance with the latest EC Directives.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: Remove affected person from source of contamination. Get medical attention if any discomfort continues.

In case of skin contact: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

In case of eye contact: Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

If swallowed: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

If inhaled: Central nervous system depression including narcotic effects such as drowsiness, narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

In case of skin contact: Prolonged contact may cause redness, irritation and dry skin.

In case of eye contact: May cause temporary eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for doctor: No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing Media: Suitable extinguishing media: alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2 Special Hazards Arising from the Substance or Mixture

Specific Hazards: Carbon oxides.



ETHYL ACETATE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

5.3 Advice for Fire-fighters

Protective Equipment for Fire-fighters: Positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Follow precautions for safe handling described in this safety data sheet. Take precautionary measures against static discharges. Avoid inhalation of vapours and contact with skin and eyes.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be immediately alerted to the Environmental Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4 Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions: Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame.

Storage class: Flammable liquid storage.

7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Name	STD	TWA – 8 Hrs	STEL – 15 Min
Ethyl Acetate	WEL	200 ppm	400 ppm

WEL = Workplace Exposure Limit

Ingredient Comments

DNEL Industry Inhalation. 1468 mg/m³
 DNEL Consumer Inhalation. 734 mg/m³
 DNEL Industry Dermal Long Term 63mg/kg/day
 DNEL Industry Inhalation Long Term 734 mg/m³
 DNEL Consumer Dermal Long Term 37mg/kg/day
 DNEL Consumer Inhalation Long Term 367mg/m³
 PNEC Freshwater 0.26
 PNEC Soil 0.22mg/kg
 PNEC Sediment 0.34mg/kg
 PNEC STP 650mg/l

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment



(a) Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Butyl rubber gloves are recommended.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Other Protection: Wear rubber apron. Wear rubber footwear.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU), fitted with type A2 gas filter cartridge.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) **Appearance Form:** colourless liquid

b) **Odour** Fruity

c) **Odour threshold** no data available

d) **pH** no data available

e) **Melting point / freezing point** -83.8°C

f) **Initial boiling point and boiling range** 76-77°C

g) **Flash point** -4°C closed cup

h) **Evaporation rate** 4.5 (diethyl ether=1)

i) **Flammability (solid, gas)** no data available

j) **Upper/lower flammability or explosive limits** 2.2% lower, 11.5% upper

k) **Vapour pressure** no data available

l) **Vapour density** 3.04

m) **Relative density** 0.899 – 0.903 @ 20°C

n) **Solubility (ies)** soluble in water

o) **Partition coefficient: n-octanol/water** 0.68

p) **Auto-ignition temperature** 427°C



ETHYL ACETATE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

q) **Decomposition temperature** no data available

r) **Viscosity** 0.4508 mPas @ 20°C

s) **Explosive properties** no data available

t) **Oxidising properties** no data available

9.2 Other information

Mol. Weight 88.11

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No known reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal ambient temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous Polymerisation: Will not polymerise.

10.4 Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

Materials To Avoid: Strong oxidising substances.

10.6 Hazardous decomposition products

Oxides of: Carbon.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: (Oral LD50): 4934 mg/kg Rabbit OECD 401

(Dermal LD50): > 20000 mg/kg Rabbit OECD 404

Skin corrosion/irritation: Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation: Slightly irritating.

Respiratory or skin sensitisation: Irritating to respiratory system. Vapours have a narcotic effect and may cause headache, fatigue, dizziness, nausea and vomiting.

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information

Ingestion: May cause discomfort if swallowed. Narcotic effect.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity: The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Toxicity to Fish

Ethyl Acetate	LC50 96 hours 230 mg/l Pimephales promelas (Fat-head Minnow)
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Toxicity to Daphnia and other Aquatic Invertebrates

Ethyl Acetate	NOEC 72 hours > 100 mg/l Daphnia magna
----------------------	--

12.2 Persistence and degradability

The product is readily biodegradable.

12.3 Bioaccumulative potential

No data available. Partition coefficient: 0.68

12.4 Mobility in soil

The product is soluble in water. Surface Tension: 24 mN/m 20.

12.5 Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6 Other adverse effects

Not determined.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

General Information: Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority. Do not puncture or incinerate even when empty. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14 TRANSPORT INFORMATION

General: Wear protective clothing as described in Section 8 of this safety data sheet.

14.1 UN number (ADR/RID/IMDG/ICAO) 1173

14.2 UN proper shipping name Ethyl Acetate

14.3 Transport hazard class(es)

ADR/RID/IMDG/ICAO Class: 3

ADR Label No: 3

IMDG Class: 3

ICAO Class/Division: 3

Transport label:



14.4 Packing group

ADR/RID/IMDG/ICAO Packing group: II

14.5 Environmental hazards No

14.6 Special precautions for user

EMS: F-E, S-D

Emergency Action Code: •3YE

Hazard Identification No. (ADR/RID): 33

Tunnel Restriction Code: (D/E)

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15 REGULATORY INFORMATION

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

National Regulations: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I. 2009 No. 716).

EU Legislation: Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).



ETHYL ACETATE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

This product may impact SEVESO storage regulations.

Guidance: CHIP for everyone HSG228.

Workplace Exposure Limits EH40.

Safety Data Sheets for Substances and Preparations.

Approved Classification and Labelling Guide (Sixth edition)

L131.

DSEAR

Water Hazard Classification: WGK 1

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out.

Inventory Information: TSCA EINECS PICCS NZIOC KECL ISHL

ENCS

AICS DSL IECS

SECTION 16 OTHER INFORMATION

Hazard Statements in Full

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



EUROFIX COLOR™ SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: EUROFIX COLOR™

145750, 146750, 148750, 149750

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

Solution for fixation/conservation of biological samples.

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England

+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (gas) (Category 4), H332

Eye irritation, (Category 2), H319

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

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



Pictogram

Signal word

Danger

Hazard statement(s)

H302 - Harmful if swallowed

H332 - Harmful if inhaled

H319 - Causes serious eye irritation

Precautionary statements:

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/ physician

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

2.3 Other hazards

None.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Ethanol**

CAS No: 64-17-5

EC No: 200-578-6

Index No: 603-002-00-5

Classification: Flam. Liq. 2 (H225), Eye Irrit. 2 (H319)

Concentration: <25%

Component: **Acetone**

CAS No: 67-64-1

EC No: 200-662-2

Index No: 606-001-00-8

Classification: Flam. Liq. 2 (H225), Eye Irrit. 2 (H319), STOT SE 3 (H336), EUH066

Concentration: <5%

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety datasheet to the doctor in attendance.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

If swallowed: Clean mouth with water and drink afterwards plenty of water.

If inhaled: Move to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

-

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media (use media appropriate to the circumstances and environment): carbon dioxide (CO₂), water spray, alcohol-resistant foam, dry chemical.

5.2 Special hazards arising from the substance or mixture

Because of its flammability, the mixture can burn in the presence of an ignition source.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas. Keep away from ignition sources.

6.2 Environmental precautions

Should not be released into the environment. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.



EUROFIX COLOR™ SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

6.3 Methods and material for containment and cleaning up

Absorb spill with inert material (eg dry sand or earth), then place in a chemical waste container. After cleaning, flush away traces with water.

6.4 Reference to other sections

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not breathe vapours or spray mist. Ensure that ventilation is adequate before using this product. Avoid contact with skin and eyes. Take necessary personal protective precautions before using this product. Keep away from heat and flame. Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions: Store in a tightly closed container. Store in a cool, dry, well-ventilated area.

Incompatible products: no information available.

7.3 Specific end use(s)

No other specific end uses(s) are specified apart from those listed in Section 1.2.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Component	Ethanol 64-17-5	Acetone 67-64-1
Austria	STEL: 2000 ppm STEL: 3800 mg/m ³ TWA: 1000 ppm TWA: 1900 mg/m ³	STEL: 2000 ppm STEL: 4800 mg/m ³ TWA: 500 ppm TWA: 1200 mg/m ³
Denmark	TWA: 1000 ppm TWA: 1900 mg/m ³	STEL: 500 ppm STEL: 1200 mg/m ³ TWA: 250 ppm TWA: 600 mg/m ³
European Union		TWA: 500 ppm TWA: 1210 mg/m ³
Finland	STEL: 1300 ppm STEL: 2500 mg/m ³ TWA: 1000 ppm TWA: 1900 mg/m ³	STEL: 630 ppm STEL: 1500 mg/m ³ TWA: 500 ppm TWA: 1200 mg/m ³
France	STEL: 5000 ppm STEL: 9500 mg/m ³ TWA: 1000 ppm TWA: 1900 mg/m ³	STEL: 1500 ppm STEL: 3620 mg/m ³ TWA: 500 ppm TWA: 1210 mg/m ³
Germany	TWA: 500 ppm TWA: 960 mg/m ³ Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m ³ Skin	STEL: 1000 ppm STEL: 2400 mg/m ³ TWA: 500 ppm TWA: 1210 mg/m ³
Ireland	STEL: 1000 ppm	TWA: 500 ppm TWA: 1200 mg/m ³
Italy		TWA: 500 ppm TWA: 1210 mg/m ³
Norway	STEL: 625 ppm STEL: 1187.5 mg/m ³ TWA: 500 ppm TWA: 950 mg/m ³	
Poland	TWA: 1900 mg/m ³	STEL: 1800 mg/m ³ TWA: 600 mg/m ³
Portugal	TWA: 1000 ppm	
Spain	STEL: 1000 ppm STEL: 1910 mg/m ³	TWA: 500 ppm TWA: 1210 mg/m ³
Switzerland	STEL: 1000 ppm STEL: 1920 mg/m ³ TWA: 500 ppm TWA: 960 mg/m ³	STEL: 1000 ppm STEL: 2400 mg/m ³ TWA: 500 ppm TWA: 1200 mg/m ³
The Netherlands	STEL: 1900 mg/m ³ TWA: 260 mg/m ³	STEL: 2420 mg/m ³ TWA: 1210 mg/m ³
UK	STEL: 3000 ppm STEL: 5760 mg/m ³ TWA: 1000 ppm TWA: 1920 mg/m ³	STEL: 1500 ppm STEL: 3620 mg/m ³ TWA: 500 ppm TWA: 1210 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure controls

Engineering measures: Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection: No special protective equipment required.

Hand protection: Wear appropriate protective gloves.

Eye protection: Wear tightly fitting safety goggles or safety glasses with side-shields.

Skin and body protection: Protective clothing to protect exposed skin.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls: No information available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) **Appearance:** Dark Red

b) **Odour:** pungent

c) **Odour threshold:** no information available

d) **pH:** no information available

e) **Melting point / freezing point:** no information available

f) **Initial boiling point and boiling range:** no information available

g) **Flash point:** 30°C

h) **Evaporation rate:** no information available

i) **Flammability (solid, gas):** no information available

j) **Upper/lower flammability or explosive limits:** no information available

k) **Vapour pressure:** no information available

l) **Vapour density:** no information available

m) **Relative density:** no information available

n) **Solubility (ies):** soluble in water

o) **Partition coefficient: n-octanol/water:** no information available

p) **Auto-ignition temperature:** no information available

q) **Decomposition temperature:** no information available

r) **Viscosity:** no information available

s) **Explosive properties:** no information available

t) **Oxidising properties:** no information available

9.2 **Other information:** no information available

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

-

10.2 Chemical stability

Stable under normal conditions. Do not freeze.

10.3 Possibility of hazardous reactions

-

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

No particular materials.



EUROFIX COLOR™ SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

10.6 Hazardous decomposition products

Under normal use – none.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol	7060mg/kg (Rat)		124.7mg/L (Rat) 4 h
Acetone	5800mg/kg (Rat)		76mg/L (Rat) 4 h

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and other aquatic invertebrates
Ethanol		12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
Acetone		4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 8300: 96 h Lepomis macrochirus mg/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static	12600 - 12700: 48 h Daphnia magna mg/L EC50 10294 - 17704: 48 h Daphnia magna mg/L EC50 Static

12.2 Persistence and degradability

No information available

Chemical Name	log Pow
Ethanol	-0.32
Acetone	-0.24

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

12.7 Additional information

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues / unused products: In accordance with local and national regulations. Should not be released into the environment.

Contaminated packaging: Empty containers should be disposed of at an approved waste handling site for recycling or disposal.

SECTION 14 TRANSPORT INFORMATION

14.1 UN number: UN1993

14.2 UN proper shipping name: Flammable Liquid, n.o.s. (Ethanol, Acetone)

14.3 Transport hazard class(es): 3

14.4 Packing group: III

14.5 Environmental hazards

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15 REGULATORY INFORMATION

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

Chemical Name	French RG number
Ethanol	RG 84
Acetone	RG 84

TSCA - Complies

EINECS/ELINCS -

DSL/NDSL -

PICCS -

ENCS -

IECSC -

AICS -

KECL -

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical Safety Assessment

No information available

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H225 - Highly flammable liquid and vapour

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

EUH066 - Repeated exposure may cause skin dryness or cracking

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



10% FORMALIN SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: 10% Formalin

145200, 145300, 145400, 145420, 145700, 145800, 145900, 1460, 146200, 146300, 146400, 148900, 148910, 148926, 148980, 148998, 149910, 151000

1.2 Relevant identified uses of the substance or mixture and uses advised against: laboratory chemical (in vitro diagnostic)

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England

+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302

Skin sensitisation (Category 1), H317

Acute toxicity, Inhalation (Category 4), H332

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 1B), H350

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

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



Pictogram

Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects

H350 May cause cancer

Contains Formaldehyde.

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

See Section 16 for the full text of H-Statements mentioned in this Section.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Formaldehyde**

CAS No: 50-00-0

EC No: 200-001-8

Index No: 605-001-00-5

Classification: Acute Tox. 3 (H301 + H311 + H331), Skin Corr. 1B (H314), Skin Sens. 1 (H317), Muta. 2 (H341), Carc. 1B (H350)

Concentration: < 5%

Component: **Methanol**

CAS No: 67-56-1

EC No: 200-659-6

Index No: 603-001-00-x

Registration No: 01-2119433307-44-xxxx

Classification: Flam. Liq. 2 (H225); Acute Tox. 3 (H301 + H311 + H331); STOT SE 1 H370

Concentration: < 1%

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (Section 2.2) and/or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective gear.



10% FORMALIN SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect and place in container for disposal according to local regulations (see Section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal, see Section 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition—no smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

No other specific uses are specified apart from those listed in Section 1.2.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits: this product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

	Formaldehyde 50-00-0	Methanol 67-56-1
Austria	STEL: 0.5 ppm STEL: 0.6 mg/m ³ TWA: 0.5 ppm TWA: 0.6 mg/m ³	STEL: 800 ppm STEL: 1040 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
Belgium	STEL: 0.3 ppm STEL: 0.38 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³
Denmark	STEL: 0.3 ppm STEL: 0.4 mg/m ³ TWA: 0.3 ppm TWA: 0.4 mg/m ³	STEL: 400 ppm STEL: 520 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
France	TWA: 0.5 ppm STEL: 1 ppm	STEL: 1000 ppm STEL: 1300 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
Germany	STEL: 0.6 ppm STEL: 0.74 mg/m ³ TWA: 0.3 ppm TWA: 0.37 mg/m ³	STEL: 800 ppm STEL: 1080 mg/m ³ TWA: 200 ppm TWA: 270 mg/m ³

	Formaldehyde 50-00-0	Methanol 67-56-1
Ireland	STEL: 2 ppm STEL: 2.5 mg/m ³ TWA: 2 ppm TWA: 2.5 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³
Italy		TWA: 200 ppm TWA: 260 mg/m ³
Poland	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	STEL: 300 mg/m ³ TWA: 100 mg/m ³
Portugal	STEL: 0.3 ppm	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m ³
Spain	STEL: 0.3 ppm STEL: 0.37 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³
Sweden	STEL: 0.6 ppm STEL: 0.74 mg/m ³ TWA: 0.3 ppm TWA: 0.37 mg/m ³	STEL: 250 ppm STEL: 350 mg/m ³ TWA: 200 ppm TWA: 250 mg/m ³
The Netherlands	STEL: 0.5 mg/m ³ TWA: 0.15 mg/m ³	TWA: 133 mg/m ³
UK	STEL: 2 ppm STEL: 2.5 mg/m ³ TWA: 2 ppm TWA: 2.5 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.



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This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) **Appearance Form:** liquid
- b) **Odour** no data available
- c) **Odour threshold** no data available
- d) **pH** no data available
- e) **Melting point / freezing point** no data available
- f) **Initial boiling point and boiling range** 100°C at 1.013 hPa
- g) **Flash point** 85°C
- h) **Evaporation rate** no data available
- i) **Flammability (solid, gas)** no data available
- j) **Upper/lower flammability or explosive limits**
Upper 70% (V), Lower 7% (V)
- k) **Vapour pressure** 53hPa at 39°C
- l) **Vapour density** no data available
- m) **Relative density** 1.080g/cm³
- n) **Solubility (ies)** completely miscible
- o) **Partition coefficient: n-octanol/water** no data available
- p) **Auto-ignition temperature** no data available
- q) **Decomposition temperature** no data available
- r) **Viscosity** no data available
- s) **Explosive properties** no data available
- t) **Oxidising properties** no data available

9.2 Other information

No data available.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

No materials to be mentioned in particular.

10.6 Hazardous decomposition products

Carbon oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data

available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information

Chemical Name	
Formaldehyde	LD50 oral 600mg/kg (Rat)
	LD50 dermal 270mg/kg (Rabbit)
	LC50 inhalation 0.578mg/L (Rat) 4 h
Methanol	LD50 oral - rat - 5628mg/kg
	LC50 inhalation - rat - 4h - 83.2mg/l/4h

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects: contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Toxicity to Fish	
Formaldehyde	0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 100- 136: 96 h Oncorhynchus mykiss mg/L LC50 static 1510: 96 h Lepomis macrochirus µg/L LC50 static 22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static
	LC50 - Pimephales promelas - 28200mg / L 96h
Methanol	LC50 - Pimephales promelas - 28200mg / L 96h

Toxicity to Daphnia and other Aquatic Invertebrates	
Formaldehyde	11.3 - 18: 48 h Daphnia magna mg/L EC50 Static
	2: 48 h Daphnia magna mg/L LC50
Methanol	EC50 - Daphnia magna - >10000mg/l

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

Chemical Name	log Pow
Formaldehyde	0.35
Methanol	-0.77

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available.

12.7 Additional information

None.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Dispose of in accordance with all federal, state, and local regulations. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.



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This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 14 TRANSPORT INFORMATION

IATA/DOT/ICAO: not regulated

14.1 UN number: -

14.2 UN proper shipping name Not dangerous goods

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15 REGULATORY INFORMATION

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

No data available.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to in Sections 2 and 3

H225 Highly flammable liquid and vapour.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

Acute Tox. Acute toxicity

Carc. Carcinogenicity

Flam. Liq. Flammable liquids

Muta. Germ cell mutagenicity.

Skin Corr. Skin corrosion

Skin Sens. Skin sensitisation

STOT SE Specific target organ toxicity - single exposure

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



LUGOL'S IODINE SOLUTION SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: Lugol's Iodine Solution

145750, 146750, 148750, 149750

1.2 Relevant identified uses of the substance or mixture and uses advised against: laboratory chemical (in vitro diagnostic).

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England
+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin Irritation (Category 2)

Eye Irritation (Category 2)

2.2 Label elements

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



Pictogram:

Signal Word: Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

Recommend restriction to professional users only. Dyes and Stains by their physical nature may result in permanent staining if in contact with skin and clothing.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: Iodine

CAS No: 7553-56-2

EC No: 231-442-4

Classification: Acute Tox 4 (inhal) (H332), Acute Tox 4 (dermal) (H312), Aquatic Acute1 (H400)

Concentration: <25%

Component: Potassium Iodide

CAS No: 7681-11-0

EC No: 231-659-4

Classification: Acute tox 4 (oral) (H302), Eye irrit 2 (H319), Skin irrit 2 (H315)

Concentration: <50%

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

If exposed keep patient calm and seek immediate medical attention. Show this safety data sheet to doctor/physician in attendance.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Get medical advice/attention.

In case of skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/attention.

If swallowed: Do NOT induce vomiting. Rinse out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membranes.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use alcohol-resistant foam or fine water spray, dry chemical powder or carbon dioxide

5.2 Special hazards arising from the substance or mixture

Hydrogen Iodide.

5.3 Advice for firefighters

Wear self-contained breathing apparatus /protective clothing. Avoid contact with skin and eyes.



LUGOL'S IODINE SOLUTION SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Observe all warning labels on container. Avoid contact with skin and eyes. Avoid breathing dust/fumes/gas/mist/vapours/spray; ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Wash hands thoroughly after handling.

6.2 Environmental precautions

Avoid discharge to the environment. Prevent further leakage or spillage where safe to do so. Do not let product enter drains or water course. Inform responsible authorities as appropriate.

6.3 Methods and material for containment and cleaning up

Absorb spillage with appropriate absorbent material e.g. vermiculite or sand; and dispose into suitably labelled closed containers for disposal according to local regulations. Wash spillage site with water and appropriate detergent.

6.4 Reference to other sections

For disposal refer to section 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Take precaution to avoid exposure. Avoid contact with eyes and skin. Avoid spillage and breathing dust or aerosols. Ensure adequate ventilation of the working area. Wear appropriate personal protective equipment provided. Avoid prolonged or repeated exposure. Wash hands thoroughly after handling. Do not eat or drink when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Replace container lid after use and keep container tightly closed to prevent leakage.

7.3 Specific end use(s)

Recommend restriction to professional users only.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

	Iodine 7553-56-2
UK	STEL: 0.1 ppm STEL: 1.1 mg/m ³
France	STEL: 0.1 ppm STEL: 1.0 mg/m ³

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice/ Wash hands before breaks and at the end of the workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Avoid exposure to sprays/mist/aerosols. Use face shield and/or safety goggles for eye protection complying with appropriate government standards such as EN166 (EU).

(b) Skin Protection: Handle with chemical-resistant, impervious gloves complying with appropriate government standards: EU Directive 89/686/EEC; standard EN 374. Inspect gloves prior to use to ensure adequate protection. Use proper glove removal technique to avoid skin contact with substance/mixture. Dispose of contaminated gloves after use in accordance with local and national applicable laws and good laboratory practises. Wash and dry hands thoroughly after handling. Promptly remove any contaminated clothing and clean appropriately before reuse.

(c) Body Protection: Use protective clothing with closed cuffs and closed neck, appropriate to the concentration /amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: For nuisance exposures use respirator and/ or air hood where local exhaust ventilation is inadequate Use products tested and approved to appropriate government standards such as NIOSH (US) or EN 143 / EN 14387 (EU).

8.2.3 Environmental Exposure Controls
None

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance dark brown liquid
 - b) Odour Pungent
 - c) Odour threshold no data available
 - d) pH no data available
 - e) Melting point / freezing point no data available
 - f) Initial boiling point and boiling range no data available
 - g) Flash point no data available
 - h) Evaporation rate no data available
 - i) Flammability (solid, gas) no data available
 - j) Upper/lower flammability or explosive limits no data available
 - k) Vapour pressure no data available
 - l) Vapour density no data available
 - m) Relative density no data available
 - n) Solubility (ies) no data available
 - o) Partition coefficient: n-octanol/water no data available
 - p) Auto-ignition temperature no data available
 - q) Decomposition temperature no data available
 - r) Viscosity no data available
 - s) Explosive properties no data available
 - t) Oxidising properties no data available
- 9.2 Other information no data available



LUGOL'S IODINE SOLUTION SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under specified conditions of use and storage.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

Products of Carbon Oxides and Nitrogen Oxides may be produced on burning or heating. The nature of released decomposition products has not been determined.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity:

Oral, mouse: LD50=1,000mg/kg bw (Potassium Iodide)

Dermal, rabbit: LD50 = 1425 mg/kg bw (Iodine)

Inhalation, rat: LC50 = 4.588 mg/L 4h (Iodine).

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Potential health effects

Inhalation: Maybe harmful if inhaled. Contains components which may cause irritation to mucous membranes and upper respiratory tract.

Ingestion: Maybe harmful if ingested. Contains components which may cause vomiting or other adverse effects such as diarrhoea.

Skin: Causes irritation in contact with skin.

Eyes: Causes serious eye irritation.

Signs and Symptoms of Exposure

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membranes.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: Iodine – NN1575000

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to Fish

Iodine	LC50 - Oncorhynchus mykiss (rainbow trout) - 1.7 mg/l - 96h
7553-56-2	

Toxicity to Daphnia and other Aquatic Invertebrates

Iodine	EC50 - Daphnia magna (Water flea) - 0.2 mg/l - 48h
7553-56-2	EC50 - Algae - 0.13mg/l – 72h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Do not let undiluted product or large quantities enter drains or water course. Inform responsible authorities as appropriate.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Iodine - Very toxic to aquatic life.

12.7 Additional information

No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Dispose of as hazardous waste and offer non-recyclable solutions to a licensed waste material processor. Comply with local regulations.

Contaminated Packaging: Dispose of as unused product.

SECTION 14 TRANSPORT INFORMATION

14.1 UN number n/a

14.2 UN proper shipping name n/a

14.3 Transport hazard class(es) n/a

14.4 Packing group n/a

14.5 Environmental hazards n/a

14.6 Special precautions for user No data available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15 REGULATORY INFORMATION

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

All components are listed as existing substances in Europe.

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for this product.



LUGOL'S IODINE SOLUTION SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to in Section 3.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



MIF / MIF COLOUR SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: MIF / MIF Colour

1465, 148935

1.2 Relevant identified uses of the substance or mixture and uses advised against: laboratory chemical (in vitro diagnostic)

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England
+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302

Skin sensitisation (Category 1), H317

Acute toxicity, Inhalation (Category 4), H332

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 1B), H350

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

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



Pictogram

Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects

H350 May cause cancer

Contains Formaldehyde.

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

See Section 16 for the full text of H-Statements mentioned in this Section.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Formaldehyde**

CAS No: 50-00-0

EC No: 200-001-8

Index No: 605-001-00-5

Classification: Acute Tox. 3 (H301 + H311 + H331), Skin Corr. 1B (H314), Skin Sens. 1 (H317), Muta. 2 (H341), Carc. 1B (H350)

Concentration: < 5%

Component: **Methanol**

CAS No: 67-56-1

EC No: 200-659-6

Index No: 603-001-00-x

Registration No: 01-2119433307-44-xxxx

Classification: Flam. Liq. 2 (H225); Acute Tox. 3 (H301 + H311 + H331); STOT SE 1 H370

Concentration: < 1%

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (Section 2.2) and/or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective gear.



MIF / MIF COLOUR SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect and place in container for disposal according to local regulations (see Section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal, see Section 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition—no smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

No other specific uses are specified apart from those listed in Section 1.2.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits: this product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

	Formaldehyde 50-00-0	Methanol 67-56-1
Austria	STEL: 0.5 ppm STEL: 0.6 mg/m ³ TWA: 0.5 ppm TWA: 0.6 mg/m ³	STEL: 800 ppm STEL: 1040 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
Belgium	STEL: 0.3 ppm STEL: 0.38 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³
Denmark	STEL: 0.3 ppm STEL: 0.4 mg/m ³ TWA: 0.3 ppm TWA: 0.4 mg/m ³	STEL: 400 ppm STEL: 520 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
France	TWA: 0.5 ppm STEL: 1 ppm	STEL: 1000 ppm STEL: 1300 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³
Germany	STEL: 0.6 ppm STEL: 0.74 mg/m ³ TWA: 0.3 ppm TWA: 0.37 mg/m ³	STEL: 800 ppm STEL: 1080 mg/m ³ TWA: 200 ppm TWA: 270 mg/m ³

	Formaldehyde 50-00-0	Methanol 67-56-1
Ireland	STEL: 2 ppm STEL: 2.5 mg/m ³ TWA: 2 ppm TWA: 2.5 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³
Italy		TWA: 200 ppm TWA: 260 mg/m ³
Poland	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	STEL: 300 mg/m ³ TWA: 100 mg/m ³
Portugal	STEL: 0.3 ppm	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m ³
Spain	STEL: 0.3 ppm STEL: 0.37 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³
Sweden	STEL: 0.6 ppm STEL: 0.74 mg/m ³ TWA: 0.3 ppm TWA: 0.37 mg/m ³	STEL: 250 ppm STEL: 350 mg/m ³ TWA: 200 ppm TWA: 250 mg/m ³
The Netherlands	STEL: 0.5 mg/m ³ TWA: 0.15 mg/m ³	TWA: 133 mg/m ³
UK	STEL: 2 ppm STEL: 2.5 mg/m ³ TWA: 2 ppm TWA: 2.5 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.



MIF / MIF COLOUR SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) **Appearance Form:** liquid
b) **Odour** no data available
c) **Odour threshold** no data available
d) **pH** no data available
e) **Melting point / freezing point** no data available
f) **Initial boiling point and boiling range** 100°C at 1.013 hPa
g) **Flash point** 85°C
h) **Evaporation rate** no data available
i) **Flammability (solid, gas)** no data available
j) **Upper/lower flammability or explosive limits**
Upper 70% (V), Lower 7% (V)
k) **Vapour pressure** 53hPa at 39°C
l) **Vapour density** no data available
m) **Relative density** 1.080g/cm³
n) **Solubility (ies)** completely miscible
o) **Partition coefficient: n-octanol/water** no data available
p) **Auto-ignition temperature** no data available
q) **Decomposition temperature** no data available
r) **Viscosity** no data available
s) **Explosive properties** no data available
t) **Oxidising properties** no data available

9.2 Other information

No data available.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

No materials to be mentioned in particular.

10.6 Hazardous decomposition products

Carbon oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data

available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information

Chemical Name

Formaldehyde	LD50 oral 600mg/kg (Rat) LD50 dermal 270mg/kg (Rabbit) LC50 inhalation 0.578 mg/L (Rat) 4 h
Methanol	LD50 oral - rat - 5628 mg/kg LC50 inhalation - rat - 4h - 83.2 mg/l/4h
Thimerosal	LD50 oral - rat - 98mg/kg

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects: contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Toxicity to Fish

Formaldehyde	0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 100- 136: 96 h Oncorhynchus mykiss mg/L LC50 static 1510: 96 h Lepomis macrochirus µg/L LC50 static 22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static
Methanol	LC50 - Pimephales promelas - 28200 mg / L 96h

Toxicity to Daphnia and other Aquatic Invertebrates

Formaldehyde	11.3 - 18: 48 h Daphnia magna mg/L EC50 Static 2: 48 h Daphnia magna mg/L LC50
Methanol	EC50 - Daphnia magna - >10000 mg/l

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

Chemical Name

Formaldehyde	log Pow 0.35
Methanol	-0.77

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available.

12.7 Additional information

None.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Dispose of in accordance with all federal, state, and local regulations. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.



MIF / MIF COLOUR SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 14 TRANSPORT INFORMATION

IATA/DOT/ICAO: not regulated

14.1 UN number: -

14.2 UN proper shipping name Not dangerous goods

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15 REGULATORY INFORMATION

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

No data available.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to in Sections 2 and 3

H225 Highly flammable liquid and vapour.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

Acute Tox. Acute toxicity

Carc. Carcinogenicity

Flam. Liq. Flammable liquids

Muta. Germ cell mutagenicity.

Skin Corr. Skin corrosion

Skin Sens. Skin sensitisation

STOT SE Specific target organ toxicity - single exposure

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



SAF SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: SAF

(Sodium Acetate-Acetic Acid-Formalin Solution)
145500, 145501, 1461, 1461A, 146500, 146501, 148920,
148960, 148965, 149920, 149960, 153000, 249400

1.2 Relevant identified uses of the substance or mixture and uses advised against: laboratory chemical (in vitro diagnostic)

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road,
Wokingham, Berkshire, RG41 2QL, England
+44 (0) 118 979 5566
technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566
(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302
Skin sensitisation (Category 1), H317
Acute toxicity, Inhalation (Category 4), H332
Germ Cell Mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

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



Pictogram

Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
Contains Formaldehyde

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician
P308 + P313 - IF exposed or concerned: Get medical advice/ attention

2.3 Other hazards

No data available.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Formaldehyde**

CAS No: 50-00-0

EC No: 200-001-8

Index No: 605-001-00-5

Classification: Acute Tox. 3 (H301 + H311 + H331); Skin Corr. 1B (H314); Skin Sens. 1 (H317); Muta. 2 (H341); Carc. 1B (H350); Concentration: < 5%

Component: **Methanol**

CAS No: 67-56-1

EC No: 200-659-6

Index No: 603-001-00-x

Registration No: 01-2119433307-44-xxxx

Classification: Flam. Liq. 2 (H225); Acute Tox 3 (H301 + H311 + H331); STOT SE 1 (H370)

Concentration: < 1%

Component: **Acetic Acid**

CAS No: 64-19-7

EC No: 200-580-7

Index No: -

Registration No: -

Classification: Skin Corr. 1A (H314) ; Flam. Liq 3 (H226)

Concentration: ≤ 2%

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothes and shoes.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (Section 2.2) and/or in Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides.



SAF SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective gear.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Contain spillage and place in container for disposal according to local regulations (see Section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal, see Section 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition—no smoking. Take measures to prevent the build-up of electrostatic charge. For precautions, see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

No other specific uses are specified apart from those listed in Section 1.2.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

	Formaldehyde 50-00-0	Methanol 67-56-1	Acetic Acid 64-19-7
Austria	STEL: 0.5 ppm STEL: 0.6 mg/m ³ TWA: 0.5 ppm TWA: 0.6 mg/m ³	STEL: 800 ppm STEL: 1040 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³	STEL: 20 ppm STEL: 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Belgium	STEL: 0.3 ppm STEL: 0.38 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³	STEL: 15 ppm STEL: 38 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Denmark	STEL: 0.3 ppm STEL: 0.4 mg/m ³ TWA: 0.3 ppm TWA: 0.4 mg/m ³	STEL: 400 ppm STEL: 520 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³	STEL: 20 ppm STEL: 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
France	TWA: 0.5 ppm STEL: 1 ppm	STEL: 1000 ppm STEL: 1300 mg/m ³ TWA: 200 ppm TWA: 260 mg/m ³	STEL: 10 ppm STEL: 25 mg/m ³

	Formaldehyde 50-00-0	Methanol 67-56-1	Acetic Acid 64-19-7
Germany	STEL: 0.6 ppm STEL: 0.74 mg/m ³ TWA: 0.3 ppm TWA: 0.37 mg/m ³	STEL: 800 ppm STEL: 1080 mg/m ³ TWA: 200 ppm TWA: 270 mg/m ³	STEL: 20 ppm STEL: 50 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Ireland	STEL: 2 ppm STEL: 2.5 mg/m ³ TWA: 2 ppm TWA: 2.5 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³	STEL: 15 ppm STEL: 37 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Italy		TWA: 200 ppm TWA: 260 mg/m ³	TWA: 10 ppm TWA: 25 mg/m ³
Poland	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	STEL: 300 mg/m ³ TWA: 100 mg/m ³	STEL: 30 mg/m ³ TWA: 15 mg/m ³
Portugal	STEL: 0.3 ppm	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m ³	STEL: 15 ppm TWA: 10 ppm TWA: 25 mg/m ³
Spain	STEL: 0.3 ppm STEL: 0.37 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³	STEL: 15 ppm STEL: 37 mg/m ³ TWA: 10 ppm TWA: 25 mg/m ³
Sweden	STEL: 0.6 ppm STEL: 0.74 mg/m ³ TWA: 0.3 ppm TWA: 0.37 mg/m ³	STEL: 250 ppm STEL: 350 mg/m ³ TWA: 200 ppm TWA: 250 mg/m ³	STEL: 10 ppm STEL: 25 mg/m ³ TWA: 5 ppm TWA: 13 mg/m ³
The Netherlands	STEL: 0.5 mg/m ³ TWA: 0.15 mg/m ³	TWA: 133 mg/m ³	
UK	STEL: 2 ppm STEL: 2.5 mg/m ³ TWA: 2 ppm TWA: 2.5 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.



SAF SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) **Appearance** aqueous solution Form: colourless liquid
- b) **Odour** characteristic
- c) **Odour threshold** no data available
- d) **pH** no data available
- e) **Melting point / freezing point** no data available
- f) **Initial boiling point and boiling range** 102°C
- g) **Flash point** >105°C
- h) **Evaporation rate** no data available
- i) **Flammability (solid, gas)** no data available
- j) **Upper/lower flammability or explosive limits** no data available
- k) **Vapour pressure** no data available
- l) **Vapour density** >1
- m) **Relative density** 1.071
- n) **Solubility (ies)** Soluble in water
- o) **Partition coefficient: n-octanol/water** no data available
- p) **Auto-ignition temperature** no data available
- q) **Decomposition temperature** no data available
- r) **Viscosity** no data available
- s) **Explosive properties** no data available
- t) **Oxidising properties** no data available

9.2 Other information

No data available.

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

No materials to be mentioned in particular.

10.6 Hazardous decomposition products

Carbon oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information

Chemical Name	
Formaldehyde	LD50 oral 600 mg/kg (Rat)
	LD50 dermal 270 mg/kg (Rabbit)
	LC50 inhalation 0.578 mg/L (Rat) 4 h
Methanol	LD50 oral - rat - 5628 mg / kg
	LC50 inhalation - rat - 4h - 83.2 mg/l/4h
Acetic Acid	LD50 oral 3310 mg/kg (Rat)
	LD50 dermal 1060 mg/kg (Rabbit)
	LC50 inhalation 11.4 mg/L (Rat) 4 h

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects: contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Toxicity to Fish	
Formaldehyde	0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 100- 136: 96 h Oncorhynchus mykiss mg/L LC50 static 1510: 96 h Lepomis macrochirus µg/L LC50 static 22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static
	Methanol LC50 - Pimephales promelas - 28200 mg / L 96h
	Acetic Acid 75: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Pimephales promelas mg/L LC50 static

Toxicity to Daphnia and other Aquatic Invertebrates

Formaldehyde	11.3 - 18: 48 h Daphnia magna mg/L EC50 Static
	2: 48 h Daphnia magna mg/L LC50
Methanol	EC50 - Daphnia magna - >10000 mg/l
Acetic Acid	47: 24 h Daphnia magna mg/L EC50
	65: 48 h Daphnia magna mg/L EC50 Static

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

Chemical Name	log Pow
Formaldehyde	0.35
Methanol	-0.77
Acetic Acid	0

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Additional information

None.



SAF SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Dispose of waste in accordance with all federal, state, and local regulations.

Contaminated packaging: Dispose of as unused product.

SECTION 14 TRANSPORT INFORMATION

ICAO/IATA: not regulated

14.1 UN number: -

14.2 UN proper shipping name Not dangerous goods

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15 REGULATORY INFORMATION

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

No data available.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to in Sections 2 and 3

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

Acute Tox. Acute toxicity

Carc. Carcinogenicity

Flam. Liq. Flammable liquids

Muta. Germ Cell Mutagenicity

Skin Corr. Skin corrosion

Skin Sens. Skin sensitisation

STOT SE Specific target organ toxicity - single exposure

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.



SAFEFIX™ ECOLOGICAL FIXATIVE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006 – 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier: SafeFix™ Ecological Fixative

145080, 146030, 1474, 148931, 1497, 149931

1.2 Relevant identified uses of the substance or mixture and uses advised against: laboratory chemical (in vitro diagnostic)

1.3 Details of the supplier:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England;

+44 (0) 118 979 5566;

technical@apacor.com

1.4 Emergency Contact Number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin Sens. 1 H317

This mixture does not present a physical or chemical hazard.

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

In compliance with EC regulation 1272/2008 and its amendments.



Pictogram:

Signal word: Warning

Hazard statement(s)

H317 May cause an allergic skin reaction.

Precautionary statement(s)

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **1-(cis-3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride**

CAS No: 51229-78-8

Index No: 612-251-00-9

Classification: Flam. Sol. 2 (H228), Acute Tox. 4 (H302), Skin Irrit. 2 (H315), Skin Sens. 1 (H317), Repr. 2 (H361d), Aquatic Chronic 2 (H411)

Concentration: ≤ 1%

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: not applicable.

In case of skin contact: Remove contaminated clothing and wash the skin thoroughly with soap and water.

In case of eye contact: Wash thoroughly with water for 15 minutes holding the eyelids open.

If swallowed: Rinse mouth with water. Do not induce vomiting.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable methods of extinction: foam, water. Do not use water jet.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment, gloves and protective eye glasses.

6.2 Environmental precautions

Contain and control leaks or spills with non-combustible absorbent materials, such as sand etc.

6.3 Methods and material for containment and cleaning up

Clean with water, detergent.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Store in Polypropylene, Polyethylene or glass containers in dry, ventilated place at > 5°C.

7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



SAFIX™ ECOLOGICAL FIXATIVE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006 – 453/2010

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance** Form: liquid (aqueous solution)
Colour: light yellow
- b) Odour** no data available
- c) Odour threshold** no data available
- d) pH** 3.5-4.5
- e) Melting point / freezing point** Freezing point: < 4°C (aqueous solution)
- f) Initial boiling point and boiling range** Boiling point: 100°C (aqueous solution)
- g) Flash point** no data available
- h) Evaporation rate** no data available
- i) Flammability (solid, gas)** no data available
- j) Upper/lower flammability or explosive limits**
no data available
- k) Vapour pressure** no data available
- l) Vapour density** no data available
- m) Relative density** no data available
- n) Solubility (ies)** no data available
- o) Partition coefficient: n-octanol/water** no data available
- p) Auto-ignition temperature** no data available
- q) Decomposition temperature** no data available
- r) Viscosity** no data available
- s) Explosive properties** no data available
- t) Oxidising properties** no data available

9.2 Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended handling and storage conditions in Section 7.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

Other decomposition products – no data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: May cause an allergic reaction by skin contact.

Serious eye damage/eye irritation: May cause mild irritation to eyes (rabbit, tests with similar product).

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data available for the mixture.

12.2 Persistence and degradability

No data available for the mixture.

12.3 Bioaccumulative potential

No data available for the mixture.

12.4 Mobility in soil

No data available for the mixture.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

No data available for the mixture.

12.7 Additional information

No data available for the mixture.



SAFEFIX™ ECOLOGICAL FIXATIVE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006 – 453/2010

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and its container must be determined in accordance with directive 2008/98/EC.

13.1 Waste treatment methods

13.1.1 Product/package disposal

Do not pour into drains or waterways. Recycle or dispose of waste in compliance with current, local legislation, preferably via a certified disposal company.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number: -

14.2 UN proper shipping name Not dangerous goods

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15: REGULATORY INFORMATION

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

15.1.1 EU regulations

Authorisations and/or restrictions on use: Consult the supplier.

15.1.2 National regulations

15.2 Chemical Safety Assessment: A chemical safety assessment was not carried out for this mixture.

SECTION 16: OTHER INFORMATION

The information in this datasheet is based on our current level of knowledge and on national and international regulations. The mixture must not be used for other purposes than those specified in Section 1. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Full text of H and P Statements referred to in Sections 2 and 3:

H228 Flammable solid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H411 Toxic to aquatic life with long lasting effects.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

The above information is believed to be correct but does not purport to be all inclusive and shall be used as a guide. Apacor shall not be held liable for any damages resulting from handling or from contact with the above product, since the user's working conditions are not known by Apacor.



SAFEX™ COLOUR ECOLOGICAL FIXATIVE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006 – 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier: SafEX™ Colour Ecological Fixative

145085, 146035, 148932, 149932

1.2 Relevant identified uses of the substance or mixture and uses advised against: laboratory chemical (in vitro diagnostic)

1.3 Details of the supplier:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England;

+44 (0) 118 979 5566;

technical@apacor.com

1.4 Emergency Contact Number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin Sens. 1 H317

This mixture does not present a physical or chemical hazard.

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

In compliance with EC regulation 1272/2008 and its amendments.



Pictogram:

Signal word: Warning

Hazard statement(s)

H317 May cause an allergic skin reaction.

Precautionary statement(s)

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **1-(cis-3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride**

CAS No: 51229-78-8

Index No: 612-251-00-9

Classification: Flam. Sol. 2 (H228), Acute Tox. 4 (H302), Skin Irrit. 2 (H315), Skin Sens. 1 (H317), Repr. 2 (H361d), Aquatic Chronic 2 (H411)

Concentration: ≤ 1%

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: not applicable.

In case of skin contact: Remove contaminated clothing and wash the skin thoroughly with soap and water.

In case of eye contact: Wash thoroughly with water for 15 minutes holding the eyelids open.

If swallowed: Rinse mouth with water. Do not induce vomiting.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable methods of extinction: foam, water. Do not use water jet.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment, gloves and protective eye glasses.

6.2 Environmental precautions

Contain and control leaks or spills with non-combustible absorbent materials, such as sand etc.

6.3 Methods and material for containment and cleaning up

Clean with water, detergent.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Store in Polypropylene, Polyethylene or glass containers in dry, ventilated place at > 5°C.

7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



SAFIX™ COLOUR ECOLOGICAL FIXATIVE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006 – 453/2010

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance** Form: liquid (aqueous solution)
Colour: light yellow
- b) Odour** no data available
- c) Odour threshold** no data available
- d) pH** 3.5-4.5
- e) Melting point / freezing point** Freezing point: < 4°C (aqueous solution)
- f) Initial boiling point and boiling range** Boiling point: 100°C (aqueous solution)
- g) Flash point** no data available
- h) Evaporation rate** no data available
- i) Flammability (solid, gas)** no data available
- j) Upper/lower flammability or explosive limits**
no data available
- k) Vapour pressure** no data available
- l) Vapour density** no data available
- m) Relative density** no data available
- n) Solubility (ies)** no data available
- o) Partition coefficient: n-octanol/water** no data available
- p) Auto-ignition temperature** no data available
- q) Decomposition temperature** no data available
- r) Viscosity** no data available
- s) Explosive properties** no data available
- t) Oxidising properties** no data available

9.2 Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended handling and storage conditions in Section 7.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

Other decomposition products – no data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: May cause an allergic reaction by skin contact.

Serious eye damage/eye irritation: May cause mild irritation to eyes (rabbit, tests with similar product).

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data available for the mixture.

12.2 Persistence and degradability

No data available for the mixture.

12.3 Bioaccumulative potential

No data available for the mixture.

12.4 Mobility in soil

No data available for the mixture.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

No data available for the mixture.

12.7 Additional information

No data available for the mixture.



SAFIFIX™ COLOUR ECOLOGICAL FIXATIVE SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006 – 453/2010

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and its container must be determined in accordance with directive 2008/98/EC.

13.1 Waste treatment methods

13.1.1 Product/packaging disposal

Do not pour into drains or waterways. Recycle or dispose of waste in compliance with current, local legislation, preferably via a certified disposal company.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number: -

14.2 UN proper shipping name Not dangerous goods

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15: REGULATORY INFORMATION

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

15.1.1 EU regulations

Authorisations and/or restrictions on use: Consult the supplier.

15.1.2 National regulations

15.2 Chemical Safety Assessment: A chemical safety assessment was not carried out for this mixture.

SECTION 16: OTHER INFORMATION

The information in this datasheet is based on our current level of knowledge and on national and international regulations. The mixture must not be used for other purposes than those specified in Section 1. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Full text of H and P Statements referred to in Sections 2 and 3:

H228 Flammable solid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H411 Toxic to aquatic life with long lasting effects.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

The above information is believed to be correct but does not purport to be all inclusive and shall be used as a guide. Apacor shall not be held liable for any damages resulting from handling or from contact with the above product, since the user's working conditions are not known by Apacor.



TRITON X SOLUTION SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier: 1472, 172018

TRITON X Solution

Used at concentration of $\leq 0.1\%$ in: 145300, 145400, 145420, 145500, 145501, 145650, 145800, 145900, 146300, 146400, 146500, 146501, 146650, 148900, 148910, 148920, 148926, 148935, 148960, 148965, 148980, 148998, 149910, 149920, 149960, 151000, 153000, 248300, 249400, 249420, 249425

1.2 Relevant identified uses of the substance or mixture and uses advised against: for laboratory use (in vitro diagnostic).

1.3 Details of the supplier of the Safety Data Sheet:

Apacor Limited, Unit 5 Sapphire Centre, Fishponds Road, Wokingham, Berkshire, RG41 2QL, England
+44 (0) 118 979 5566

technical@apacor.com

1.4 Emergency telephone number:

+44 (0)118 979 5566

(Monday-Friday 0900-1700 excluding UK Public Holidays)

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Serious eye damage (Category1), H318

See Section 16 for the full text of H-Statements mentioned in this Section.

2.2 Label elements

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



Pictogram

Signal word

Danger

Hazard statement(s)

H318 Causes serious eye damage

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/attention.

See Section 16 for the full text of H-Statements mentioned in this Section.

2.3 Other hazards

None known.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: **Triton X-100** (concentration 10–20%) (included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No 1907/2006 (REACH))

CAS No: 9002-93-1

EC No: -

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Classification: Acute Tox. 4 (H302); Serious Eye Dam. 1 (H318)
Concentration: 5–10%

See Section 16 for the full text of H-Statements mentioned in this Section.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of eye contact: rinse out with plenty of water. Immediately consult an ophthalmologist.

If swallowed: immediately make victim drink water (2 glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Irritation and corrosion. Risk of serious damage to eyes.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, foam, dry chemical or carbon dioxide. (Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.)

Unsuitable extinguishing media: For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.



TRITON X SOLUTION SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal, see Section 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation of vapour or mist. For precautions see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Tightly closed. Recommended storage temperature see product label.

7.3 Specific end use(s)

No other specific uses are specified apart from those listed in Section 1.2.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(b) Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

(c) Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

(d) Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) **Appearance** Form: clear, liquid; Colour: light yellow

b) **Odour** no data available

c) **Odour threshold** no data available

d) **pH** 9.7

e) **Melting point / freezing point** approx. 6°C

f) **Initial boiling point and boiling range** 200°C

g) **Flash point** 251°C

h) **Evaporation rate** no data available

i) **Flammability (solid, gas)** no data available

j) **Upper/lower flammability or explosive limits** no data available

k) **Vapour pressure** <1 hPa at 25°C

l) **Vapour density** no data available

m) **Relative density** 1.070 g/cm³

n) **Solubility (ies)** Soluble in water

o) **Partition coefficient: n-octanol/water** no data available

p) **Auto-ignition temperature** no data available

q) **Decomposition temperature** no data available

r) **Viscosity** no data available

s) **Explosive properties** no data available

t) **Oxidising properties** no data available

9.2 **Other information** no data available

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.



TRITON X SOLUTION SAFETY DATA SHEET

This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

10.5 Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6 Hazardous decomposition products

Other decomposition products—no data available. In the event of fire: see Section 5.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: no component of this product present at levels greater than 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: not available. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

11.2 Further information

Triton X-100

Acute oral toxicity: LD50 Rat: 1,800 mg/kg (RTECS)

Germ cell mutagenicity: Genotoxicity in vitro Mutagenicity (mammal cell test): Mouse lymphoma test Result: negative

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

Components: Triton X-100

Toxicity to fish

LC50 *Lepomis macrochirus*: 2,800 - 3,200 µg/l; 96 h

Toxicity to daphnia and other aquatic invertebrates

LC50 *Daphnia magna*: 11.2 mg/l; 48 h

12.7 Additional information

No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

SECTION 14 TRANSPORT INFORMATION

ICAO/IATA/DOT: not regulated

14.1 UN number: -

14.2 UN proper shipping name Not dangerous goods

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not intended to be transported in bulk.

SECTION 15 REGULATORY INFORMATION

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

Substances of very high concern (SVHC): This product does contain substances of very high concern above the respective regulatory limit (>0.1% w/w), Regulation (EC) No 1907/2006 (REACH), Article 57).

Contains: Triton X-100.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

SECTION 16 OTHER INFORMATION

Full text of H-Statements referred to in Sections 2 and 3

H302 Harmful if swallowed

H318 Causes serious eye damage

Acute Tox. Acute Toxicity

Serious Eye Dam. Serious Eye Damage

The information supplied in this SDS is correct to the best of our knowledge. We do not accept any liability for loss, injury or damage, which may result from its use.

Mini Parasep[®] SF Faecal Parasite Concentrator



Code	Product
148800	Mini Parasep [®] SF
148900	Mini Parasep [®] SF Formalin & Triton X
148910	Mini Parasep [®] SF Formalin & Triton X
148920	Mini Parasep [®] SF SAF & Triton X
148926	Mini Parasep [®] SF Formalin & Triton X
148931	Mini Parasep [®] SF SafEFix [™] Ecological Fixative
148932	Mini Parasep [®] SF SafEFix [™] Colour Ecological Fixative
148935	Mini Parasep [®] SF MIF & Triton X
148980	Mini Parasep [®] SF Formalin & Triton X
148650	Mini Parasep [®] SF Bailenger + 40ml Triton X
148750	Mini Parasep [®] SF EuroFix Color [™] + 5ml Lugol's Iodine
248930	Mini Parasep [®] SF AlcorFix [™]

Discard in accordance with your standard and local operating procedures for clinical waste.

Products can be ordered direct from Apacor or from an appointed distributor
Visit our website for all the latest information www.apacor.com or e-mail: sales@apacor.com
