

APA732 V2.3 01/2021

See label for storage conditions and expiry date. Please adhere to the following guidelines when handling Mini Parasep<sup>®</sup> SF. To avoid cross contamination the Mini Parasep<sup>®</sup> 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: Apacor Triton X solution) to the chamber.

1D Introduce a scoop of faecal sample to the fixative using the spoon on the end of the Mini Parasep<sup>®</sup> SF filter. Mix in thoroughly with the Mini Parasep<sup>®</sup> SF spoon. If the sample is hard, break it up with the end of the spoon.

### Emulsification

2 Seal Mini Parasep<sup>®</sup> 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<sup>®</sup> SF and centrifuge at 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

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

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 sediment onto a slide and cover with coverslip. Alternatively, follow laboratory SOP for slide preparation.



CE marking (European directive 98/79/CE on in vitro diagnostic medical devices)



For in vitro diagnostic use



Catalogue number





Expiry date MM/YYYY



Storage temperature limitation



Manufacturer



Consult instruction for use

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™

108810, 108886, 149995, 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, United Kingdom +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

#### 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 ( $CO_2$ ), 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.

In case of skin contact: Wash off immediately with soap and

#### ALCORFIX™ SAFETY DATA SHEET

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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

No information available.

# 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

For disposal, see Section 13.

#### 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 <sup>3</sup> TWA: 1000 ppm TWA: 1920 mg/m <sup>3</sup>			STEL: 500 ppm STEL: 1250 mg/m <sup>3</sup> TWA: 400 ppm TWA: 999 mg/m <sup>3</sup>	STEL: 250 ppm STEL: 333 mg/m <sup>3</sup> TWA: 200 ppm TWA: 266 mg/m <sup>3</sup> Skin
France	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> STEL: 5000 ppm STEL: 9500 mg/m <sup>3</sup>		STEL: 10 ppm STEL: 25 mg/m <sup>3</sup>	STEL: 400 ppm STEL: 980 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 1000 ppm STEL: 1300 mg/m
Spain	STEL: 1000 ppm STEL: 1910 mg/m <sup>3</sup>		STEL: 15 ppm STEL: 37 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	STEL: 400 ppm STEL: 1000 mg/m <sup>3</sup> TWA: 200 ppm TWA: 500 mg/m <sup>3</sup>	S* TWA: 200 ppm TWA: 266 mg/m <sup>3</sup>
Germany	TWA: 500 ppm TWA: 960 mg/m <sup>3</sup> Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m <sup>3</sup> Skin	TWA: 0.1 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup> Ceiling / Peak: 0.4 mg/m <sup>3</sup> Ceiling / Peak: 4 mg/m <sup>3</sup>	TWA: 10 pm TWA: 25 mg/m <sup>3</sup> Ceiling / Peak: 20 ppm Ceiling / Peak: 50 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 500 mg/m <sup>3</sup> Ceiling / Peak: 400 ppm Ceiling / Peak: 1000 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 270 mg/m <sup>3</sup> Ceiling / Peak: 800 ppm Ceiling / Peak: 1080 mg/m <sup>3</sup> Skin
Italy					TWA: 200 ppm TWA: 260 mg/m Skin
Portugal	TWA: 1000 ppm		STEL: 15 ppm TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	STEL: 400 ppm TWA: 200 ppm	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m
The Netherlands	Skin STEL: 1900 mg/m <sup>3</sup> TWA: 260 mg/m <sup>3</sup>				Skin TWA: 133 mg/m TWA: 100 ppm
Finland	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> STEL: 1300 ppm STEL: 2500 mg/m <sup>3</sup>		TWA: 5 ppm TWA: 13 mg/m <sup>3</sup> STEL: 10 ppm STEL: 25 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 500 mg/m <sup>3</sup> STEL: 250 ppm STEL: 620 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 270 mg/m STEL: 250 ppm STEL: 330 mg/m <sup>3</sup> Skin
Denmark	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>		TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 490 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m Skin
Austria	STEL 2000 ppm STEL 3800 mg/m <sup>3</sup> TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>		STEL 20 ppm STEL 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	STEL 800 ppm STEL 2000 mg/m <sup>3</sup> TWA: 200 ppm TWA: 500 mg/m <sup>3</sup>	Skin STEL 800 ppm STEL 1040 mg/m TWA: 200 ppm TWA: 260 mg/m
Switzerland	STEL: 1000 ppm STEL: 1920 mg/m <sup>3</sup> TWA: 500 ppm TWA: 960 mg/m <sup>3</sup>	STEL: 4 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	STEL: 400 ppm STEL: 1000 mg/m <sup>3</sup> TWA: 200 ppm TWA: 500 mg/m <sup>3</sup>	Skin STEL: 800 ppm STEL: 1040 mg/n TWA: 200 ppm TWA: 260 mg/m
Poland	TWA: 1900 mg/m3		STEL: 30 mg/m3 TWA: 15 mg/m3	STEL: 1200 mg/m3 TWA: 900 mg/m3	STEL: 300 mg/m TWA: 100 mg/m
Norway	TWA: 500 ppm TWA: 950 mg/m3 STEL: 500 ppm STEL: 950 mg/m3		TWA: 10 ppm TWA: 25 mg/m3 STEL: 20 ppm STEL: 37.5 mg/m3	TWA: 100 ppm TWA: 245 mg/m3 STEL: 150 ppm STEL: 306.25 mg/m3	TWA: 100 ppm TWA: 130 mg/m Skin STEL: 150 ppm STEL: 162.5 mg/m
Ireland	STEL: 1000 ppm		TWA: 10 ppm TWA: 25 mg/m3 STEL: 15 ppm STEL: 37 mg/m3	TWA: 200 ppm STEL: 400 ppm Skin	TWA: 200 ppm TWA: 260 mg/m STEL: 600 ppm STEL: 780 mg/m Skin
European Union			TWA 10 ppm TWA 25 mg/m3		TWA: 200 ppm TWA: 260 mg/m 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.

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#### 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
- I) 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.

**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	5,158.00m	g/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.

			Toxicity to Daphnia and
Chemical Name	Toxicity to Algae	Toxicity to Fish	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 ECS0 static 64.8:72 h Chlorella vulgaris mg/L ECS0 24:96 h Chlorella vulgaris mg/L ECS0	0.162: 96 h Oncorhynchus mykiss mg/L LCS0 flow-through 0.03 - 0.05: 96 h Oncorhynchus mykiss mg/L LCS0 semi-static 0.34 - 0.93: 96 h Oncorhynchus mykiss mg/L LCS0 static 0.218 - 0.42: 96 h Pimephales promelas mg/L LCS0 flow-through 0.06: 96 h Pimephales promelas mg/L LCS0 96 h Pimephales promelas mg/L LCS0 semi-static 0.15: 96 h Cyprinus carpio mg/L LCS0 semi- static 0.23 - 0.74: 96 h Cyprinus carpio mg/L LCS0 semi- static 0.25 - 57.18: 96 h Cyprinus carpio mg/L LCS0 semi- static 0.35 - 61.32: 96 h Lepomis macrochirus mg/L LCS0 flow-through 3.55 - 6.32: 96 h Lepomis macrochirus mg/L LCS0 semi-static 0.48 - 1.72: 96 h Poecilia reticulata mg/L LCS0 semi-static 0.48 - 1.72: 96 h	0.75:48 h Daphnia magna mg/LECS0 0.538 - 0.908:48 h Daphnia magna mg/LECS0 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 ug/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 flow-through 0.75600: 96 h Lepomis macrochrus mg/L LC50 flow-through	



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### 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	

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

No information available.

#### 12.7 Additional information

No information available.

#### 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: ||

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.



#### APAFIX<sup>™</sup> SAFETY DATA SHEET

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

#### 1.1 Product Identifier: Apafix<sup>™</sup>

108801, 108887 145002, 145003, 146003, 146004, 149901, 160001, 902500, 907500

**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, United Kingdom +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]:

The 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

Labelling according to Regulation (EC) No 1272/2008 [CLP] Hazard statement(s) NC Not Classified

### Precautionary statements:

P261 – Avoid breathing vapour/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Contains Acetic Acid **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: Acetic Acid CAS No: 64-19-7 EC No: 200-580-7 Index No: 607-002-00-6 **Registration No: -**Classification: Skin Corr. 1A (H314), Flam. Liq. 3 (H226), Eye Dam. 1 (H318) Concentration: < 10% Component: Menthol CAS No: 89-78-1 EC No: 201-939-0 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: **Thymol** CAS No: 89-83-8 EC No: 201-944-8 Index No: 604-032-00-1 Registration No: -Classification: Acute Tox. 4 (H302), Skin Corr. 1B (H314), Aquatic Chronic 2 (H411) Concentration: < 1%

#### **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.

**In case of skin contact**: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if discomfort continues.

**If swallowed:** Clean mouth with water and drink afterwards plenty of water. Consult a physician.

**If inhaled:** Move to fresh air. Consult a physician if discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

The most important 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

**Notes to physician:** Treat symptomatically. Have facilities in place to wash skin and eyes in case of exposure. Severe cases of exposure should receive prompt medical attention.

**Eye contact** – May cause eye irritation. May cause redness. **Skin Contact** – May irritate the skin.

**Ingestion** – May irritate the mouth and throat. Small amounts will leave taste in mouth, larger amounts may cause nausea and vomiting.

Inhalation – Acute: May irritate the respiratory system and cause coughing. Delayed: Prolonged exposure to vapours or mists can cause damage to the mucous membranes of the respiratory system.

#### SECTION 5 FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

This product is non-combustible. Water spray, dry powder, carbon dioxide or alcohol resistant foam.

**5.2** Special hazards arising from the substance or mixture In case of fire, toxic or irritating fumes or vapours may be formed. Contact with metals may form hydrogen gas which is flammable and can result in explosion.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting.



#### APAFIX<sup>™</sup> SAFETY DATA SHEET

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#### SECTION 6: ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment, gloves and protective eye glasses. 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 (e.g. dry sand or earth), then place in a chemical waste container. After cleaning, flush away traces with water.

#### 6.4 Reference to other sections

For disposal, see Section 13.

#### 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.

# 7.2 Conditions for safe storage, including any incompatibilities

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

#### 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

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

	Acetic Acid 64-19-7
Austria	STEL: 20ppm
	STEL: 50mg/m <sup>3</sup>
	TWA: 10ppm
	TWA: 25 mg/m <sup>3</sup>
Belgium	STEL: 15ppm
	STEL: 38 mg/m <sup>3</sup>
	TWA: 10ppm
	TWA: 25mg/m <sup>3</sup>
Denmark	STEL: 20ppm
	STEL: 50 mg/m <sup>3</sup>
	TWA: 10ppm
	TWA: 25 mg/m <sup>3</sup>
France	STEL: 10ppm
	STEL: 25 mg/m <sup>3</sup>

	Acetic Acid 64-19-7
Germany	STEL: 20ppm STEL: 50 mg/m <sup>3</sup>
	TWA: 10ppm TWA: 25 mg/m <sup>3</sup>
Ireland	STEL: 15ppm
	STEL: 37 mg/m <sup>3</sup>
	TWA: 10ppm
	TWA: 25 mg/m <sup>3</sup>
Italy	TWA: 10ppm
	TWA: 25 mg/m <sup>3</sup>
Poland	STEL: 30 mg/m <sup>3</sup>
	TWA: 15 mg/m <sup>3</sup>
Portugal	STEL: 10ppm
	TWA: 10ppm
	TWA: 25 mg/m <sup>3</sup>
Spain	STEL: 15ppm
	STEL: 37 mg/m <sup>3</sup>
	TWA: 10ppm
	TWA: 25 mg/m <sup>3</sup>
Sweden	STEL: 10ppm
	STEL: 25 mg/m <sup>3</sup>
	TWA: 5ppm
	TWA: 13 mg/m <sup>3</sup>

#### 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. Ensure adequate ventilation, especially in confined areas.

#### 8.2.2 Personal protective equipment

(a) Eye/face protection: Tightly fitting safety goggles. Face shield (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 airpurifying 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



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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

See section 6.2

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### **9.1 Information on basic physical and chemical properties a) Appearance:** Form: liquid

Colour: Clear

- **b) Odour:** pungent/acetic acid + distinct thyme smell
- c) Odour threshold: no data available
- d) pH: <1

e) Melting point / freezing point: no data available

f) Initial boiling point / boiling range: no data available

g) Flash point: Not applicable. The mixture is non-flammable.

h) Evaporation rate: no data available

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

j) Upper/lower flammability or explosive limits: Not

applicable. The mixture is non-flammable.

- k) Vapour pressure: no data available
- I) Vapour density: no data available
- m) Relative density: no data available
- 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

Reactions characteristic of weak acids.

#### 10.2 Chemical stability

Stable under recommended handling and storage conditions under Section 7.

#### 10.3 Possibility of hazardous reactions

May react vigorously or exothermically. Pressure may build up if reaction occurs in a sealed container. Will not polymerise.

#### 10.4 Conditions to avoid

Avoid heat, direct sunlight and moisture. Avoid storage in freezing conditions. Avoid storage with incompatible materials. Avoid storage in an unstable manner or in a situation that would result in exposure to the product. It is advisable to store the product within some form of containment to prevent spillages reaching drainage systems. **10.5 Incompatible materials** 

#### Alkalis. Oxidising agents. Metals.

#### **10.6 Hazardous decomposition products**

Under normal use – none

#### SECTION 11: TOXICOLOGICAL INFORMATION 11.1 Information of toxicological effects Acute toxicity:

**Product**: The mixture has not been tested for toxicological properties. This information refers to acetic acid as a pure substance.

Inhalation: Industry – Dermal; Long term systemic effects 22mg/kg/day Haematological effects Eye contact: no data available

Skin contact: no data available

**Ingestion**: Sodium salt of acetic acid, pH 6-7

**Skin corrosion/irritation:** Dose: 0.5ml, 4 hr, Rabbit Primary dermal irritation index: 1.1 OECD Guideline 404 10% solution. Slightly irritating.

Serious eye damage/eye irritation: OECD 405,

rabbit, 10% solution, 4 hour, 0.1ml. Erythema =

2.67, corneal swelling = 87%.

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

The mixture has not been tested for ecotoxicological properties.

The following information contained in section 12 refers to acetic acid as a pure substance.

Acute toxicity - fish: LC50, 96 hours: > 1000 mg/l,

Onchorhynchus mykiss (Rainbow trout)

OECD 203 (Fish, Acute Toxicity Test)

Freshwater, semi-static.

Mortality

Acute toxicity – aquatic invertebrates: EC<sub>50</sub>, 48 hours: > 300.82 mg/l, Daphnia magna

OECD Guideline 202.

Static, freshwater.

Mobility.

Test substance potassium acetate; result based on the acetate ion.

Acute toxicity – aquatic plants: EC<sub>50</sub>, 72 hours: > 300.82 mg/l, Static, saltwater, Skeletonema costatum.

Test substance potassium acetate; result based on the acetate ion.

Acute toxicity – microorganisms: EC₅₀: 850 mg/l, Industry -Dermal; Long term systemic effects 22 mg/kg/day Pseudomonas putida, static, freshwater, 16 hour

Acute toxicity – terrestrial: Not available.

Chronic toxicity – fish early life stage: Not available.



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#### Short term toxicity – embryo and sac fry stages: Industry -

Dermal; Long term systemic effects 22 mg/kg/day

No supplied or registered information.

Chronic toxicity – aquatic invertebrates: Not available. Toxicity to soil: Not available.

Toxicity to terrestrial plants: Not available.

#### 12.2 Persistence and degradability

**Phototransformation:** Water - DT<sub>50</sub>: 26.7 days Degradation by hydroxyl radicals. Calculated value.

Stability (hydrolysis): Scientifically unjustified.

Biodegradation: Water – Degradation (%) 96%: 20 days

Readily biodegradable – Half life: 2 days **Biological oxygen demand:** No information available.

**Chemical oxygen demand:** No information available.

#### 12.3 Bioaccumulative potential

BCF: 3.16, QSAR calculation. Fish, freshwater. Not bioaccumulating.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT or vPvB not classified according to current EC criteria.

12.6 Other adverse effects

No information available.

12.7 Additional information

No information available.

#### 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 of dispose of waste in compliance with current, local legislation, preferably via a certified waste company.

#### SECTION 14: TRANSPORT INFORMATION

IATA/DOT/IMDG/TDG - Not regulated

- 14.1 UN number: Not applicable
- 14.2 UN proper shipping name: Not applicable
- 14.3 Transport hazard class(es): Not applicable
- 14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: Not applicable

#### SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture National regulations: Industry – Dermal; Long term systemic effects 22mg/kg/day
EU legislation: 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).

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). Regulation (EU) 453/2010.

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 use 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-Statements referred to under sections 2 and 3

- H226 Flammable liquid and vapour
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- P261 Avoid breathing vapour/spray

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

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.



### **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, 145800, 145900, 1460, 146200, 146300, 146400, 108900, 108910, 148998, 149910, 151000, 900000, 905000

**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, United Kingdom +44 (0) 118 979 5566 <u>technical@apacor.com</u>

#### 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.



#### **10% FORMALIN SAFETY DATA SHEET**

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

#### **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.

#### 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	Methanol
	50-00-0	67-56-1
Austria	STEL: 0.5 ppm	STEL: 800 ppm
	STEL: 0.6 mg/m <sup>3</sup>	STEL: 1040 mg/m <sup>3</sup>
	TWA: 0.5 ppm	TWA: 200 ppm
	TWA: 0.6 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>
Belgium	STEL: 0.3 ppm	STEL: 250 ppm
	STEL: 0.38 mg/m <sup>3</sup>	STEL: 333 mg/m <sup>3</sup>
		TWA: 200 ppm
		TWA: 266 mg/m <sup>3</sup>

	Formaldehyde	Methanol
	50-00-0	67-56-1
Denmark	STEL: 0.3 ppm	STEL: 400 ppm
	STEL: 0.4 mg/m <sup>3</sup>	STEL: 520 mg/m <sup>3</sup>
	TWA: 0.3 ppm	TWA: 200 ppm
	TWA: 0.4 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>
France	TWA: 0.5 ppm	STEL: 1000 ppm
	STEL: 1 ppm	STEL: 1300 mg/m <sup>3</sup>
		TWA: 200 ppm
		TWA: 260 mg/m <sup>3</sup>
Germany	STEL: 0.6 ppm	STEL: 800 ppm
	STEL: 0.74 mg/m <sup>3</sup>	STEL: 1080 mg/m <sup>3</sup>
	TWA: 0.3 ppm	TWA: 200 ppm
	TWA: 0.37 mg/m <sup>3</sup>	TWA: 270 mg/m <sup>3</sup>
Ireland	STEL: 2 ppm	TWA: 200 ppm
	STEL: 2.5 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>
	TWA: 2 ppm	-
	TWA: 2.5 mg/m <sup>3</sup>	
Italy		TWA: 200 ppm
		TWA: 260 mg/m <sup>3</sup>
Poland	STEL: 1 mg/m <sup>3</sup>	STEL: 300 mg/m <sup>3</sup>
	TWA: 0.5 mg/m <sup>3</sup>	TWA: 100 mg/m <sup>3</sup>
Portugal	STEL: 0.3 ppm	STEL : 250 ppm
-		TWA : 200 ppm
		TWA : 260 mg/m <sup>3</sup>
Spain	STEL: 0.3 ppm	STEL: 250 ppm
	STEL: 0.37 mg/m <sup>3</sup>	STEL: 333 mg/m <sup>3</sup>
	0.	TWA: 200 ppm
		TWA: 266 mg/m <sup>3</sup>
Sweden	STEL: 0.6 ppm	STEL: 250 ppm
	STEL: 0.74 mg/m <sup>3</sup>	STEL: 350 mg/m <sup>3</sup>
	TWA: 0.3 ppm	TWA: 200 ppm
	TWA: 0.37 mg/m <sup>3</sup>	TWA: 250 mg/m <sup>3</sup>
The Netherlands	STEL: 0.5 mg/m <sup>3</sup>	TWA: 133 mg/m <sup>3</sup>
	TWA: 0.15 mg/m <sup>3</sup>	
UK	STEL: 2 ppm	STEL: 250 ppm
	STEL: 2.5 mg/m <sup>3</sup>	STEL: 333 mg/m <sup>3</sup>
	TWA: 2 ppm	TWA: 200 ppm
	TWA: 2.5 mg/m <sup>3</sup>	TWA: 266 mg/m <sup>3</sup>

#### 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 airpurifying 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

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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
- 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  $100^\circ\text{C}\,at\,1.013~\text{hPa}$

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
- I) Vapour density no data available
- m) Relative density 1.080g/cm<sup>3</sup>
- 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

Respiratory of skill sensitisation. No data ava

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
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.

## APACOR

#### **10% FORMALIN SAFETY DATA SHEET**

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

#### 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.

#### **SECTION 14 TRANSPORT INFORMATION**

IATA/DOT/IMDG/TDG: Not regulated.

14.1 UN number: -

14.2 UN proper shipping name: -

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: -

14.6 Special precautions for user: -

#### 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

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.

APACOR 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, 146500, 146501, 108920, 149920, 249400, 901000, 906000

**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, United Kingdom +44 (0) 118 979 5566 <u>technical@apacor.com</u>

#### 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



#### 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:  $\leq 2\%$ 

#### **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, alcoholresistant foam, dry chemical or carbon dioxide.



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

# **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.

#### 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	Methanol	Acetic Acid
	50-00-0	67-56-1	64-19-7
Austria	STEL: 0.5 ppm STEL: 0.6 mg/m <sup>3</sup> TWA: 0.5 ppm TWA: 0.6 mg/m <sup>3</sup>	STEL: 800 ppm STEL: 1040 mg/m <sup>3</sup> TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
Belgium	STEL: 0.3 ppm STEL: 0.38 mg/m <sup>3</sup>	STEL: 250 ppm STEL: 333 mg/m <sup>3</sup> TWA: 200 ppm TWA: 266 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 38 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>

	Formaldehyde 50-00-0	Methanol 67-56-1	Acetic Acid 64-19-7
Denmark	STEL: 0.3 ppm	STEL: 400 ppm	STEL: 20 ppm
	STEL: 0.4 mg/m <sup>3</sup>	STEL: 520 mg/m <sup>3</sup>	STEL: 50 mg/m <sup>3</sup>
	TWA: 0.3 ppm	TWA: 200 ppm	TWA: 10 ppm
	TWA: 0.4 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>
France	TWA: 0.5 ppm	STEL: 1000 ppm	STEL: 10 ppm
	STEL: 1 ppm	STEL: 1300 mg/m <sup>3</sup>	STEL: 25 mg/m <sup>3</sup>
		TWA: 200 ppm	
		TWA: 260 mg/m <sup>3</sup>	
Germany	STEL: 0.6 ppm	STEL: 800 ppm	STEL: 20 ppm
	STEL: 0.74 mg/m <sup>3</sup>	STEL: 1080 mg/m <sup>3</sup>	STEL: 50 mg/m <sup>3</sup>
	TWA: 0.3 ppm	TWA: 200 ppm	TWA: 10 ppm
	TWA: 0.37 mg/m <sup>3</sup>	TWA: 270 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>
Ireland	STEL: 2 ppm	TWA: 200 ppm	STEL: 15 ppm
	STEL: 2.5 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>	STEL: 37 mg/m <sup>3</sup>
	TWA: 2 ppm		TWA: 10 ppm
	TWA: 2.5 mg/m <sup>3</sup>		TWA: 25 mg/m <sup>3</sup>
Italy		TWA: 200 ppm	TWA: 10 ppm
		TWA: 260 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>
Poland	STEL: 1 mg/m <sup>3</sup>	STEL: 300 mg/m <sup>3</sup>	STEL: 30 mg/m <sup>3</sup>
	TWA: 0.5 mg/m <sup>3</sup>	TWA: 100 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup>
Portugal	STEL: 0.3 ppm	STEL : 250 ppm	STEL: 15 ppm
		TWA : 200 ppm	TWA: 10 ppm
		TWA : 260 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>
Spain	STEL: 0.3 ppm	STEL: 250 ppm	STEL: 15 ppm
	STEL: 0.37 mg/m <sup>3</sup>	STEL: 333 mg/m <sup>3</sup>	STEL: 37 mg/m <sup>3</sup>
		TWA: 200 ppm	TWA: 10 ppm
		TWA: 266 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>
Sweden	STEL: 0.6 ppm	STEL: 250 ppm	STEL: 10 ppm
	STEL: 0.74 mg/m <sup>3</sup>	STEL: 350 mg/m <sup>3</sup>	STEL: 25 mg/m <sup>3</sup>
	TWA: 0.3 ppm	TWA: 200 ppm	TWA: 5 ppm
	TWA: 0.37 mg/m <sup>3</sup>	TWA: 250 mg/m <sup>3</sup>	TWA: 13 mg/m <sup>3</sup>
The	STEL: 0.5 mg/m <sup>3</sup>	TWA: 133 mg/m <sup>3</sup>	
Netherlands	TWA: 0.15 mg/m <sup>3</sup>		
UK	STEL: 2 ppm	STEL: 250 ppm	
	STEL: 2.5 mg/m <sup>3</sup>	STEL: 333 mg/m <sup>3</sup>	
	TWA: 2 ppm	TWA: 200 ppm	
	TWA: 2.5 mg/m <sup>3</sup>	TWA: 266 mg/m <sup>3</sup>	

#### 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 airpurifying 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

APACOR SAF SAFETY DATA SHEET This Safety Datasheet complies with the requirements of Regulation (EC) No 1907/2006

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 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

I) 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 Daphni	a 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.

### APACOR SAF SAFETY DATA SHEET

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

### 12.5 Results of PBT and vPvB assessment

No data available.

**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 waste in accordance with all federal, state, and local regulations.

Contaminated packaging: Dispose of as unused product.

#### SECTION 14 TRANSPORT INFORMATION

IATA/DOT/IMDG/TDG: Not regulated.

14.1 UN number: -

14.2 UN proper shipping name: -

14.3 Transport hazard class(es): -

14.4 Packing group: -

14.5 Environmental hazards: -

14.6 Special precautions for user: -

#### 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

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.



### 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 ≤0.1% in: 145300, 145400, 145420, 145500, 145501, 145800, 145900, 146300, 146400, 146500, 146501, 108900, 108910, 108920, 108935, 148998, 149910, 149920, 151000, 249400, 900000, 901000, 903000, 905000, 906000, 908000

# **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, United Kingdom +44 (0) 118 979 5566 <u>technical@apacor.com</u>

#### 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]





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.

#### 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



### TRITON X SOLUTION SAFETY DATA SHEET

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

#### 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 airpurifying 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
- I) Vapour density no data available
- m) Relative density 1.070 g/cm<sup>3</sup>
- 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.

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.

### TRITON X SOLUTION SAFETY DATA SHEET

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

#### 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**

IATA/DOT/IMDG/TDG: Not regulated.

- 14.1 UN number: -
- 14.2 UN proper shipping name: -
- 14.3 Transport hazard class(es): -
- 14.4 Packing group: -
- 14.5 Environmental hazards: -

14.6 Special precautions for user: -

#### 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

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.



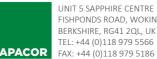
<u>Code</u>	Product
108800	Mini Parasep <sup>®</sup> SF
108801	Mini Parasep® SF Apafix™
108810	Mini Parasep <sup>®</sup> SF AlcorFix™
108900	Mini Parasep <sup>®</sup> SF Formalin & Triton X
108910	Mini Parasep <sup>®</sup> SF Formalin & Triton X
108920	Mini Parasep <sup>®</sup> SF SAF & Triton X

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

Distributed by: R- Biopharm Australia Pty Ltd 34 Woodfield Boulevard Caringbah NSW Phone 1800 023 623 Email: sales@labdiagnostics.com.au

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: orders@apacor.com





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