

# **SAFETY DATA SHEET (GHS)**

 Issue Date:
 10.02.2021

 Version:
 1.0.1

 Revision Date:
 10.02.2025

 Print Date:
 10.02.2021

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE/PRODUCT AND MANUFACTURER/IMPORTER

1.1 Product identifier:-

Product name: Antifoam liquid for aspiration system

Product number: 040725

1.2 Other means of identification:-

Not applicable.

1.3 Recommended use of the chemical and restrictions on use:-

None, if handled according to order.

Identified uses:

Details of the manufacturer and importer:-

Manufacturer:

1.4

1.5

Information and Contact Magnolia Srl Via Natta 6/A 43122 Parma Italy

Tel. +39 02935391 info.magnolia@cattani.it

Manufacturers contact in Australia Cattani - ESAM Group

280 Dundas Street, Thornbury Victoria 3071

+ 61-3 9484 1120

Email:cattani@cattani.com.au

Importer/Distributor: Cattani - ESAM Group
Emergency phone number: 13 11 26 Australia

Poisons Hotline (24 hours / 7 days)

0800 764 766 (National Poison Centre) New Zealand

To be used as an Antifoam liquid for aspiration systems.

Poisons Hotline (24 hours / 7 days)

### 2. HAZARD(S) IDENTIFICATION

2.1 GHS Classification:-

The product is classified as hazardous; Hazard classification and indication: Eye Dam1 H318 Serious eye damage, category 1 Skin Sens 1 H317 Skin sensitization, category 1

2.2 GHS Label elements, including precautionary statements:-

**Hazard Pictogram:** 





Signal word:

Danger

Hazard-determining components of

labelling:

Contains: Isotridecanol, ethoxylated

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one

[EC no. 247-500-7]; and

2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1);



Hazard statements:

**Precautionary statements:** 

Hazard statements:

H318 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

May produce an allergic reaction.

Precautionary statements:

P264 Wash hands thoroughly after use.

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.

P302+P352 IF ON SKIN: wash with plenty of water and

soap

P337+P313 If eye irritation persists: Get medical

advice/attention.

If skin irritation or rash occurs: Get medical advice Dispose of contents/container to regional law

#### 2.3 Additional information:

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

# Other hazards:

vPvB Substances: None - PBT Substances:

None

Other Hazards: No other hazards

Results of PBT and vPvB assessment; PBT: Not applicable.

vPvB: Not applicable.

# 3 COMPOSITION/INFORMATION ON INGREDIENTS Mixture of substances listed below with nonhazardous additions.

# **Description:**

Ingredient name	CAS No.	Classification	Concentration
Isotridecanol, ethoxylated(*)-(Polymer)	69011-36-5	3.3/1 Eye Dam. 1 H318	1-2 %
Isotridecanol, ethoxylated (**)-(Polymer)	69011-36-5	3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318	1-2 %
morpholine		2.6/3 Flam. Liq. 3 H226 3.2/1B Skin Corr. 1B H314	0,1-0,2%



,	110-91-8	3.1/4/Oral Acute Tox. 4 H302 3.1/4/Dermal Acute Tox. 4 H312 3.1/4/Inhal Acute Tox. 4 H332	
reaction mass of: 5-chloro-2-methyl4-i sothiazolin-3-one [EC no. 247-500-7]; and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1);	55965-84-9	3.2/1B Skin Corr. 1B H314 3.4.2/Skin Sens. 1 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410 3.1/3/Oral Acute Tox. 3 H301 3.1/3/Dermal Acute Tox. 3	0,00015 — 0,0015 %
(*) (**) The asterisk components are identified by the same number CAS but have different classifications of dangerousness. This because of the different degree of ethoxylation		H311 3.1/3/Inhal Acute Tox. 3 H331	

For the full text of the H-Statements mentioned in this Section, refer to Section 16.

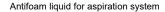
#### **FIRST AID MEASURES** 4.

#### 4.1 Description of necessary first aid measures:-

If inhaled: Provide fresh air. In case of respiratory tract irritation, consult a physician Get medical advice immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers. In case of skin contact: Wash with plenty of water. When in doubt or if symptoms are observed, get medical advice. Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice. Rinse immediately with plenty of running water and possibly with soap. Remove contaminated clothing immediately and dispose of safely. In case of eye contact: Wash immediately and thoroughly with running water, keeping eyelids raised, for at least 10 minutes. Following

this, protect the eves with sterile gauze or a clean, dry. handkerchief. OBTAIN A MEDICAL EXAMINATION. Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).

Protect uninjured eye. Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice.





If swallowed:

If swallowed, immediately drink: Water. Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Have the subject drink as much water as possible. Get medical advice. Do not induce vomiting unless explicitly authorised by a doctor.

4.2 Symptoms caused by exposure:- May causes eye irritation.

Specific information on symptoms and effects caused by the product are unknown.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.3 Medical attention and special treatment:- Treat symptomatically. Get medical advice.

- 5. FIRE FIGHTING MEASURES
- 5.1 Suitable extinguishing equipment:-Suitable extinguishing media:

Unsuitable extinguishing media:

Carbon dioxide (CO2) Extinguishing powder foam. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

- 5.2 Specific hazards arising from the substance/mixture/product:-
- 5.3 Special protective equipment and precautions for fire fighters:

Special personal protective equipment:

Overpressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

GENERAL INFORMATION Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137). Adapt protective equipment to surrounding fire. Cool endangered containers with water

in case of fire.

**Precautions:** In case of fire: Wear self-contained breathing apparatus.



# 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures:-

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

For emergency responders Remove all staff not adequately equipped to deal with the emergency. Wear appropriate personal protective equipment referred to in section 8 of the safety data sheet to prevent contamination of the skin, eyes and personal clothing. Stop the leak if there is no danger. Make the area affected by the accident accessible to workers only after adequate remediation has taken place. Ventilate the premises affected by the accident.

# 6.2 Environmental precautions:-

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3 Methods and materials for containment and cleaning up:-

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Wash with plenty of water.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13. See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 6.4 Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

### 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling:

Keep away from heat, sparks, and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

# 7.2 Conditions for safe storage, including any incompatibilities:

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details. Keep/Store only in original container. Keep container tightly closed. Keep in a cool, well-ventilated place. Do not store in temperatures below 5 °C. Store at temperatures between 5 and 35° C. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating.

# 7.3 Specific end use(s).

Information not available. None in particular.



### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Exposure control measures:

Eye protection:

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166). Protection for skin:

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### Protection for hands:

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Respiratory protection:

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLVTWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in 5/10 compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

### Refer to section 8.5

#### Occupational exposure limits:

Morpholine - CAS: 110-91-8

EU - LTE(8h): 36 mg/m3, 10 ppm - STE: 72 mg/m3, 20 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational

Exposure [4] (for references see bibliography)

ACGIH, TWA 20 ppm - TWA mg/m3 Note: Skin, A4 - Eye dam, URT irr

### **EFFECTS OF SHORT-TERM EXPOSURE:**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

The substance is irritating to the eyes, the skin and the respiratory tract.

# **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**

The substance may have effects on allergic reactions.

#### **DNEL/DMEL and PNEC values**

There are no data available on the preparation itself.

# **PNEC Values**

Not available

Engineering Measures A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.



#### 8.2 **Biological monitoring:-**

The lists valid during the making were used as basis.

# Exposure controls / Personal protective equipment / General protective and hygienic measures:

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards. Provide an emergency shower with face and eye wash station.

### Technical measures to prevent exposure:

Provide adequate ventilation

#### 8.3 Control banding:-

Use good industrial hygiene practice and general ventilation.

#### 8.4 **Engineering controls:-**

No further relevant information available.

#### 8.5 Individual protection measures include PPE:-

Eye/face protection:



#### Safety glasses

Eve glasses with side protection DIN EN 166 Use tightly fitting safety glasses as per Australian Standard AS 1336 and AS/NZS 1337. Safety glasses with side shields

### Skin protection:



# **Protective gloves**

Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm. Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits or Wear impervious rubber gloves (AS2161).

Wear a P2 particulate respirator when handling this product (AS1715/1716).

# Respiratory protection:



#### PHYSICAL/CHEMICAL PROPERTIES 9.

#### 9.1 Information on physical/chemical properties:

Appearance/Form: a) b) Colour:

Odour: c)

Odour threshold: d)

pH value: e)

Melting point/melting range: f)

**Boiling point/boiling range:** g) h) Flash point:

**Ignition temperature:** i)

Self-igniting: j)

Danger of explosion: k)

Upper/lower flammability or explosive I)

Liquid

White

Characteristic

Not determined.

6.8-7.8 (20 °C / 100 g/l)

0°C 100 °C

>100 °C

Not determined

Product is not self-igniting.

Not determined.

Lower Not determined



limits: Upper Not determined

Vapour pressure 50°C: Not determined m)

Density at 20°C: Not determined n) Relative density: o) 1.0 a/cm3 Vapour density: p) Not applicable.

Solvent separation test 20°C: Not determined. q) r) **Evaporation rate:** Not applicable.

Solubility in/miscibility with water 20°C: miscible

s) Partition coefficient: n- octanol/water: Not determined. t)

**Viscosity:** Dvnamic Not applicable. u) Kinematic | Not applicable.

Solids content: v)

#### 10. STABILITY AND REACTIVITY

#### Reactivity: 10.1

Stable under normal conditions

#### Chemical stability: 10.2

The product is stable in normal conditions of use and storage.

### Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

### Possibility of hazardous reactions:

None

#### 10.4 Conditions to avoid:

Stable under normal conditions.

#### 10.5 Incompatible materials:

None reported

#### 10.6 Hazardous decomposition products:

None

#### 11. TOXICOLOGICAL INFORMATION

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Not determined.

### Information on toxicological effects:-

# Acute toxicity / Values relevant for classification:

Acute toxicity.

Mixture is not classified as toxic according to classification criteria of CLP Regulation.

Isotridecanol, ethoxylated (\*) LD50(Oral Rat): >2000 mg/kg Isotridecanol, éthoxylated (\*\*) LD50(Oral rat): 300-2000 mg/kg

### Acute effects Acute oral toxicity

Mixture is not classified eye corrosive or eye irritant according to classification criteria of CLP.

### Practical experience/human evidence

Mixture is not classified hazardous for aspiration

### Acute dermal toxicity

Mixture is not classified skin corrosive or skin irritant according to classification criteria of CLP.

### Irritant and corrosive effects

Mixture is not classified eye corrosive or eye irritant according to classification criteria of CLP.

# Sensitisation

germ cell mutagenicity.

Mixture is classified Skin Sens 1 H317 according to classification

Repeated dose toxicity (subacute, sub-chronic, chronic)

# Subacute oral toxicity

Not known



Skin corrosion/irritation:

Serious eye damage/eye irritation: Respiratory or skin sensitization:

Germ cell mutagenicity:

Carcinogenicity: Reproductive toxicity:

Specific target organ toxicity - single

exposure:

Specific target organ toxicity - repeated

exposure:

Aspiration hazard:

Additional information:

Mixture is not classified skin corrosive or skin irritant Mixture is not classified eye corrosive or eye irritant Mixture is classified Skin Sens 1 H317 according to classification

Information not available. Information not available. Information not available.

No further relevant information available.

Information not available.

No further relevant information available.

Information not available.

# 11.2 Information on possible routes of exposure:- As per section 4.2

**Short Term (Acute) Exposure:** 

Swallowed:

Eyes: Skin:

Inhaled:

Long Term (Chronic) Exposure:

Swallowed:

Eyes: Skin: Inhaled:

11.3 Early onset symptoms related to exposure:-

11.4 Delayed health effects from exposure:-

11.5 Exposure levels and health effects:-

11.6 Interactive effects:-

11.7 Other:-

Burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. corneal opacity, iris lesions, irreversible eye coloration Mixture is not classified skin corrosive or skin irritant

Mixture is classified Skin Sens 1 H317 Mixture is classified Skin Sens 1 H317 No further relevant information available No further relevant information available No further relevant information available No further relevant information available

No further relevant information available

No further relevant information available. No further relevant information available.

#### 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity:-

# **Aquatic toxicity**

Adopt sound working practices, so that the product is not released into the environment. 8/10

Isotridecanol, ethoxylated (\*) (polymer) EC50(Carassius Auratus): 1 mg/l/96h

LC50(Daphnia): 1 mg/l/48h

Isotridecanol, ethoxylated (\*\*) (Polymer) LC50(Carassius Auratus): 1 mg/l/96h

EC50(Daphnia): 1 mg/l/48h

# 12.2 Persistence/degradability:

#### **Biodegradation**

Readly biodegradable (OECD 301/D) Readly Biodegradable (>60% 28d)

# 12.3 Bioaccumulative potential:

No further relevant information available

# 12.4 Mobility in soil:

No further relevant information available.



#### 12.5 Other adverse effects:

On the basis of available data, vPvB Substances: None - PBT Substances: None

# Additional ecological information / General notes:

Prevent from flowing into surface water/ground water.

#### Other adverse effects:

Do not allow to enter surface water or drains

#### 13. **DISPOSAL CONSIDERATIONS**

#### 13.1 Disposal methods:

### Product/Packaging disposal

# Waste codes/waste designations according to EWC/AVV

Waste code product Concentrate/larger quantities: 20 01 14\* acids.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be

evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Avoid littering. Do not contaminate soil, sewers and waterways.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

# Waste treatment options

# Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

# Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Contact a specialist disposal company or the local waste regulator for advice. This should be done in accordance with 'The Hazardous Waste Act'. Can be eliminated with domestic garbage on condition it complies with local regulations.

#### 14. TRANSPORT INFORMATION

UN number ADR / IMDG / IATA:-

Morpholine: UN2054 PG: III Class 3: Flammable liquid.

ADR/ADN/RID:NA IMDG: NA

IATA: NA

UN proper shipping name or technical name:

ADR:

Land transport (ADR/RID)

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for

transport by Road and Rail;.

IMDG, IATA:

Sea transport (IMDG)

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code)for transport by sea;.

Air transport (ICAO-TI / IATA-DGR)

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA)

Dangerous

Goods Regulations for transport by air;



# Transport hazard class(es):

# Land transport (ADR/RID)

Class(es):NA

Classification code: III

Hazard identification number (Kemler No.) NA

Tunnel restriction code : NA Special provisions : NA Hazard label(s) : NA

# Sea transport (IMDG)

Class(es) : NA EmS-No. : NA

Special provisions : NA Hazard label(s) : NA

# Air transport (ICAO-TI / IATA-DGR)

Class(es): NA

Special provisions : NA Hazard label(s) : 8



(ADR, IMDG, IATA).



Label:

Packaging group:

**Environmental hazards:** 

Special precautions for user:

Danger code: EMS Number:

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Transport/Additional information:

Ш

Corrosive and environmental damaging

A3 - A803

8 C9

Product is classified as a dangerous good for transport

If you plan to bulk transport adhere to annex II MARPOL 73/78 and the IBC code where applicable.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of

the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packaging's or in packaging's made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.



# 15. REGULATORY INFORMATION

# 15.1 Safety, health and environmental regulations/legislation specific for the substance/mixture/product:-

Classified as Hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC) approved criteria for the classifying hazardous substances [NOHSC: 1008] 3rd edition.

Standard for the Uniform Scheduling of Medicines and Poisons.

Carcinogen classification under WHS Regulation 2011, Schedule 10.

Notification status in accordance with section 3 and current national legislation.

HSNO Approval: May be used as a single component chemical under an appropriate group standard EPA NZ Classes of hazardous properties: Class 7

# 15.2 Chemical safety assessment:

For this mixture a chemical safety assessment has not been carried out.

### 16. OTHER INFORMATION

# Key to abbreviations/acronyms used in SDS:-

Text of phrases referred to under heading 3:

H318 Causes serious eye damage.

H302 Harmful if swallowed.

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H315 Causes skin irritation.

H400 Very toxic to aquatic life.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

# Main bibliographic sources:

• ECHA Registered Substances site:

http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances

- ACGIH Threshold Limit Values 2014 edition
- Istituto Superiore di Sanità National Chemical Substances Inventory (Italy)

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This material is listed on the Australian Industrial Chemical Introduction Scheme (AICIS)

### Key literature references/data sources used to compile SDS:-

Standard EN420:2003 General requirements for protective gloves: disposable gloves, e.g. nitrile rubber, material thickness 0.1 mm (Australian Standard 2161).

Long-term exposure (Level 6: < 480 min): protective gloves, e.g. nitrile rubber, material thickness 0.7 mm (Australian Standard 2161).

Personal eye protection - Eye and face protectors for occupational applications: safety glasses (Australian Standard AS 1336 and AS/NZS 1337.1:2010).

### Copyright statement:-

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.



# Abbreviations and acronyms:-

ATE = Acute Toxicity Estimates

CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CMR = Carcinogen, Mutagen or Reproductive toxicant

CO<sub>2</sub> = Carbon dioxide

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EC = European Commission

EC50 = Half maximal effective concentration

EN = European Standard (Norm) EU = European Union EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals H statement = GHS Hazard statement

IATA = International Air Transport Association

ICAO-TI = International Civil Aviation Organization-Technical Instructions

IMDG = International Maritime Dangerous Goods

LC50 = Median lethal concentration

LD50 = Median lethal dose

Log Pow = Logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NOEC/NOEL = No observed effect concentration/level

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bio accumulative and Toxic

PNEC = Predicted No Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RMM = Risk Management Measure

RRN = REACH Registration Number STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

SVHC = Substances of Very High Concern

TLV/STEL = Threshold limit value/short-term exposure limit

TLV/TWA = Threshold limit value/time weighted average

**UN = United Nations** 

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bio-accumulative

# \* Data compared to the previous version altered

### Disclaimer:

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Note for users: The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses. Provide appointed staff with adequate training on how to use chemical products.

