

### Safety Data Sheet dated 16/5/2015, version 2

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

1.1. Product identifier

Trade name: MAPELASTIC AQUADEFENSE

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

Recommended use:

Liquid membrane based on synthetic polymers water dispersion.

1.3. Details of the supplier of the safety data sheet

Supplier:

MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

Competent person responsible for the safety data sheet:

sicurezza@mapei.it

1.4. Emergency telephone number

MAPEI Ú.K. Ltd - phone: +44(0)121 508 6970

fax: +44(0)121 5086 960 www.mapei.co.uk (office hours)

### **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:

None

Hazard Statements:

None

**Precautionary Statements:** 

None

Special Provisions:

EUH210 Safety data sheet available on request.

Contents:

1,2-benzisothiazol-3(2H)-one: May produce an allergic reaction.

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None



Other Hazards:

No other hazards

### **SECTION 3: Composition/information on ingredients**

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification: 172 ppm 1,2-benzisothiazol-3(2H)-one

Index number: 613-088-00-6, CAS: 2634-33-5, EC: 220-120-9

- 1 3.2/2 Skin Irrit. 2 H315
- ♦ 3.3/1 Eye Dam. 1 H318
- ◆ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
- ♦ 4.1/A1 Aquatic Acute 1 H400
- 1 3.1/4/Oral Acute Tox. 4 H302

7 ppm 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)

Index number: 613-167-00-5, CAS: 55965-84-9

- ♦ 3.2/1B Skin Corr. 1B H314
- ♦ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
- ♦ 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 H311
- ♦ 3.1/3/Inhal Acute Tox. 3 H331

### **SECTION 4: First aid measures**

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wash immediately with water for at least 10 minutes.

In case of Ingestion:

A suspension of activated charcoal in water, or petrolium jelly may be administered.

Wash the mouth thoroughly and drink plenty of water. In case of disease consult a physician immediately and present this safety-data sheet.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

No specific hazards are encountered under normal product use.

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

Treatment:

(see paragraph 4.1)

#### **SECTION 5: Firefighting measures**

5.1. Extinguishing media



Suitable extinguishing media:

None in particular.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

The product does not present a fire hazard

Do not inhale explosion and combustion gases.

The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

#### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Limit leakages with earth or sand.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

#### **SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Fine dust may form explosive mixture with air. Keep away from open flames, heat and sparks. Do not remove shrink film in hazardous locations (because of risk of static charging/discharge)

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Store above 5℃.

7.3. Specific end use(s)

None in particular

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

8.1. Control parameters

No occupational exposure limit available



**DNEL Exposure Limit Values** 

N.A.

**PNEC Exposure Limit Values** 

N.A.

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

In case of insufficient ventilation use mask with B type filters (EN 14387).

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Thermal Hazards:

None

Environmental exposure controls:

None

#### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Appearance: paste
Colour: light blue
Odour: typical
Odour threshold: N.A.
pH: 9,5
Melting point / freezing point: N.A.

Initial boiling point and boiling range: 100 ℃

Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density:N.A.Flash point: $== ^{\circ}\mathbb{C}$ Evaporation rate:N.A.Vapour pressure:N.A.

Relative density: 1,30-1,40 g/cm³ (23°C)

Vapour density (air=1): N.A.
Solubility in water: dispersible
Solubility in oil: insoluble

Viscosity: 20000-30000 mPa.s (23℃)

Auto-ignition temperature:  $== \mathbb{C}$ Explosion limits(by volume): ==Decomposition temperature: N.A.

Partition coefficient (n-octanol/water): N.A.

Explosive properties: == Oxidizing properties: N.A.

9.2. Other information

Miscibility: N.A. Fat Solubility: N.A. Conductivity: N.A.

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Substance Groups relevant properties N.A.

### **SECTION 10: Stability and reactivity**

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products None.

#### **SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Route(s) of entry:

Ingestion: Yes Inhalation: No Contact: No

Toxicological information related to the product:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Mouse > 1150 mg/kg Test: LD50 - Route: Skin - Species: Mouse > 2000 mg/kg Test: LD50 - Route: Oral - Species: Rat > 597 mg/kg

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) - CAS: 55965-84-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 53 mg/kg

Test: LC50 - Route: Inhalation Dust - Species: Rat 330 mg/m3 - Duration: 4h Test: LC50 - Route: Inhalation - Species: Rat 2.36 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit 660 mg/kg

Corrosive/Irritating Properties:

Eye:

The product can cause a temporary irritation by contact.

Sensitizing Properties:

No effects are known.

Cancerogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:



- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

#### **SECTION 12: Ecological information**

12.1. Toxicity

Adopt good industrial practices, so that the product is not released into the environment.

Not available data on the mixture

Aquatic toxicity: the preparation is not to be considered toxic to the aquatic environment based on components.

LC50>100mg/l - aquatic species (calculated data following 1999/45/EC Directive).

Biodegradability: not readily biodegradable

Biodegradability: no data available on the preparation.

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 3.7 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae = 0.37 mg/l - Duration h: 72

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H

-isothiazol-3-one [EC no. 220-239-6] (3:1) - CAS: 55965-84-9

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 0.16 mg/l - Duration h: 48 Endpoint: LC50 - Species: Fish = 0.19 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

List of substances dangerous for the environment and corresponding classification:

>= 0.1% - < 0.25% Zinc oxide

CAS: 1314-13-2

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

EC50 (Daphnia): 0.17 mg/l (48 hr)

LC50 (Algae): 0.14 mg/l (72 hr)

LC50 (Fish): 0.14 mg/l (96 hr)

172 ppm 1,2-benzisothiazol-3(2H)-one

CAS: 2634-33-5

R50 Very toxic to aquatic organisms.

EC50 (Daphnia): 3.7 mg/l (48 hr)

EC50 (Algae): 0.37 mg/l (72 hr)

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

CAS: 55965-84-9

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

EC50 (Daphnia): 0.16 mg/l (48 hr)



LC50 (Fish): 0.19 mg/l (96 hr)

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

Not available data on the mixture

### **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of not hardened product (EC waste code): 08 04 10

The suggested European waste code is just based on the composition of the product.

According to the specific process or application field a different waste code may be necessary.

### **SECTION 14: Transport information**

14.1. UN number

UN Number: ==

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

Rail/Road(RID/ADR): no dangerous good Air (ICAO/IATA): no dangerous good Sea (IMO/IMDG): no dangerous good

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

Marine pollutant: No

N.A.

14.6. Special precautions for user

N.A.

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

N.A. No

#### **SECTION 15: Regulatory information**

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.



REACH Regulation (1907/2006) - All. XVII: N.A.

Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I -

Protection against chemical agents"

Directive 2000/39/CE and s.m.i. (Professional threshold limit)

Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions.

(Environmental regulations)

Directive 105/2003/CE (Seveso III): N.A.

ADR Agreement – IMDG Code – IATA Regulation

VOC (2004/42/EC) : N.A. g/l

15.2. Chemical safety assessment No

#### **SECTION 16: Other information**

Text of phrases referred to under heading 3:

H315 Causes skin irritation.

H318 Causes serious eve damage.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 5: Firefighting measures

SECTION 8: Exposure controls/personal protection SECTION 9: Physical and chemical properties

SECTION 11: Toxicological information

SECTION 12: Ecological information

SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,

Commission of the European Communities

SAX'S - Dangerous properties of industrial materials

Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

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 MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STE: Short-term exposure.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

OEL: European threshold limit value VLE: Threshold Limiting Value. WGK: German Water Hazard Class.

TSCA: United States Toxic Substances Control Act Inventory

DSL: DSL - Canadian Domestic Substances List