

### Safety Data Sheet dated 19/5/2017, version 3

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

1.1. Product identifier

Trade name: MAPETHERM FLEX RP 1,5 mm BASE P

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

Recommended use:

Wall coating paste

Uses advised against:

==

1.3. Details of the supplier of the safety data sheet

Supplier:

MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel: +39-02-376731 Fax: +39-02-37673.214

Competent person responsible for the safety data sheet:

sicurezza@mapei.it

1.4. Emergency telephone number

MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)
Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

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

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

None

Hazard Statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements:

P273 Ávoid release to the environment.

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

**Special Provisions:** 

None

Contains

pyrithione zinc

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



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): May produce an allergic reaction.

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

See at paragraph 11 the additional information concerning crystalline silica. The product is not classified dangerous according to the "preparations Directive" (1999/45/CE); in fact it is a water based preparation in which there are no dangerous components. The below mentioned crystalline silica, that originally is in the shape of inhalable powder with specific exposure limits, after its mixture into the preparation doesn't involve any exposure risk.

### **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:

>= 10% - < 20% free crystalline silica (Ø >10  $\mu$ )

CAS: 14808-60-7, EC: 238-878-4

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

>= 0.1% - < 0.25% polyethylene glycol monooleylether

CAS: 9004-98-2, EC: 500-016-2

**1** 3.2/2 Skin Irrit. 2 H315

4.1/A1 Aquatic Acute 1 H400

>= 0.1% - < 0.25% pyrithione zinc

CAS: 13463-41-7, EC: 236-671-3

3.1/3/Inhal Acute Tox. 3 H331
 3.1/3/Oral Acute Tox. 3 H301

3.1/3/Oral Acute 10x. 3 H3

♦ 3.3/1 Eye Dam. 1 H318

4.1/A1 Aquatic Acute 1 H400 M=100.

4.1/C1 Aquatic Chronic 1 H410 M=10.

>= 0.01% - < 0.05% free crystalline silica ( $\emptyset$  <10  $\mu$ )(\*)

CAS: 14808-60-7, EC: 238-878-4

♦ 3.9/1 STOT RE 1 H372

>= 0.01% - < 0.016% ammonia, anhydrous

Index number: 007-001-00-5, CAS: 7664-41-7, EC: 231-635-3

2.2/2 Flam. Gas 2 H221

♦ 2.5 Press. Gas H280

♦ 3.2/1B Skin Corr. 1B H314

♦ 4.1/A1 Aquatic Acute 1 H400

3.1/3/Inhal Acute Tox. 3 H331

>= 0.005% - < 0.01% sodium hydroxide; caustic soda

REACH No.: 01-2119457892-27-XXXX, Index number: 011-002-00-6, CAS: 1310-73-2, EC:



215-185-5

2.16/1 Met. Corr. 1 H290
 3.2/1A Skin Corr. 1A H314

>= 0.005% - < 0.01% 1,2-benzisothiazol-3(2H)-one

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

- 4 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
- 3.1/4/Oral Acute Tox. 4 H302

>= 0.00015% - < 0.0015% 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

- ♦ 3.1/3/Inhal Acute Tox. 3 H331
- 3.1/3/Dermal Acute Tox. 3 H311
- 3.1/3/Oral Acute Tox. 3 H301
- ♦ 3.2/1B Skin Corr. 1B H314
- 4.1/A1 Aquatic Acute 1 H400 M=10.
- 4.1/C1 Aquatic Chronic 1 H410

>= 0.00015% - < 0.0015% 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, EC: 611-341-5

- 3.2/1B Skin Corr. 1B H314
- 4 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

(\*) Substance not classified according to CE regulations. Precautionary classification for respirable powder quartz: GHS 09 - H 373

#### **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:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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

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:

Water.

CO2 or Dry chemical fire extinguisher.

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

After the product has been recovered, rinse the area and materials involved with water.

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.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

free crystalline silica (Ø >10 µ) - CAS: 14808-60-7

ACGIH - TWA(8h): 0.025 mg/m3 - Notes: (R), A2 - Pulm fibrosis, lung cancer

free crystalline silica ( $\emptyset$  <10  $\mu$ )(\*) - CAS: 14808-60-7

EU - TWA(8h): 0.025 mg/m3 - Notes: A2 (R) - Pulm fibrosis, lung cancer

ACGIH - TWA(8h): 0.025 mg/m3 - Notes: (R), A2 - Pulm fibrosis, lung cancer

ammonia, anhydrous - CAS: 7664-41-7

EU - TWA(8h): 14 mg/m3, 20 ppm - STEL: 36 mg/m3, 50 ppm

ACGIH - TWA(8h): 25 ppm - STEL: 35 ppm - Notes: Eye dam, URT irr

ÁK - TWA: 14 mg/m3 CK - TWA: 36 mg/m3

sodium hydroxide; caustic soda - CAS: 1310-73-2

ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr

**DNEL Exposure Limit Values** 

sodium hydroxide; caustic soda - CAS: 1310-73-2

Worker Industry: 1 mg/m3 - Consumer: 1 mg/m3 - Exposure: Human Inhalation -

Frequency: Long Term, local effects

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.

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

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

Appropriate engineering controls:

. None

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

9.1. Information on basic physical and chemical properties Appearance: liquid denso

907MU0900/3



Colour: various
Odour: typical
Odour threshold: N.A.
pH: 9,31

Melting point / freezing point: == °C

Initial boiling point and boiling range: nd ℃

Solid/gas flammability: ==

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

Vapour density:

Flash point:

Evaporation rate:

Vapour pressure:

N.A.

N.A.

N.A.

Relative density: 1,45 g/cm³ (23℃)

Vapour density (air=1):

Solubility in water:

Solubility in oil:

N.A.

soluble

nd

Viscosity: 27000 mPa.s (23℃)

Auto-ignition temperature: N.A.
Explosion limits(by volume): N.A.
Decomposition temperature: N.A.
Portition coefficient (p. cotonol (vector))

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

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

9.2. Other information

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

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

 Possibility of hazardous reactions None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

 Hazardous decomposition products None.

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

11.1. Information on toxicological effects

Route(s) of entry:

Ingestion: Yes Inhalation: No Contact: No

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 on main components of the mixture:

Toxicological information of the product:

N.A.

907MU0900/3



Toxicological information of the main substances found in the product:

free crystalline silica (Ø >10 µ) - CAS: 14808-60-7

a) acute toxicity:

Test: LD50 - Route: Oral > 2000 mg/kg Test: LD50 - Route: Skin > 2000 mg/kg

polyethylene glycol monooleylether - CAS: 9004-98-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 2700 mg/kg

pyrithione zinc - CAS: 13463-41-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 269 mg/kg Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

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

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit: Positive

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 = 457 mg/kg

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.

#### Cancerogenic Effects:

The IARC (International Agency for Research on Cancer) believes that the crystalline silica inhaled at the workplace can cause lung cancer in man.

However, it also points out that the cancer effect depends on the silica characteristics and on the biological-physical condition of the environment.

There is a large amount of information in support of the fact that increased risk of cancer is limited to persons suffering from silicosis.

In the current situation of studies, protection of workers from silicosis can be ensured by respecting the exposure limit values.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

If not differently specified, the information required in Regulation (EU)2015/830 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
- i) 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

Biodegradability: no data available on the preparation.

pyrithione zinc - CAS: 13463-41-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.0026 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 0.0082 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 0.0012 mg/l - Duration h: 120

sodium hydroxide; caustic soda - CAS: 1310-73-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 125 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia = 40.4 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 145 mg/l - Duration h: 24

c) Bacteria toxicity:

Endpoint: EC50 - Species: 19126 = 22 mg/l - Notes: 15 min

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 Endpoint: LC50 - Species: Fish = 2.18 mg/l - Duration h: 96

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 = 0.12 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 0.22 mg/l - Duration h: 96

Endpoint: EC50 - Species: Algae = 0.048 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae = 0.0012 mg/l - Duration h: 72

Endpoint: NOEC - Species: Fish = 0.098 mg/l - Notes: 28 d

Endpoint: NOEC - Species: Daphnia = 0.004 mg/l - Notes: 21 d

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

NΑ

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

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 hardened product (EC waste code): 08 01 12

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

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

Not classified as dangerous in the meaning of transport regulations.

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

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 Marpol and the IBC Code

no dangerous good

#### **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)

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) 2015/830

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:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

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



Social Dialogue on Respirable Crystalline Silica

On April 26, 2006 was signed a multi-sector social dialogue, based on a "Guide to Good Practices", on workers health protection who are in contact with products containing crystalline silica. The text of the agreement published in G.U. European Union (2006 / C 279/02) and the "Guide to Good Practices", with attachments, are available on www.nepsi.eu website, they offer guidelines and useful information for handling products containing respirable crystalline silica.

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

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

Text of phrases referred to under heading 3:

H315 Causes skin irritation.

H400 Very toxic to aquatic life.

H331 Toxic if inhaled.

H301 Toxic if swallowed.

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

H372 Causes damage to organs through prolonged or repeated exposure.

H221 Flammable gas.

H280 Contains gas under pressure; may explode if heated.

H314 Causes severe skin burns and eye damage.

H290 May be corrosive to metals.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 4: First aid measures

SECTION 5: Firefighting measures

SECTION 6: Accidental release measures

SECTION 7: Handling and storage

SECTION 8: Exposure controls/personal protection

SECTION 11: Toxicological information

SECTION 12: Ecological information

**SECTION 14: Transport information** 

SECTION 15: Regulatory information

SECTION 16: Other 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

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: Substance with a Union workplace exposure limit.

VLE: Threshold Limiting Value. WGK: German Water Hazard Class.

TSCA: United States Toxic Substances Control Act Inventory

DSL: DSL - Canadian Domestic Substances List

N.A.: Not available