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

1.1. Product identifier
Mixture identification:
   Trade name: MAPETHERM FLEX RP 1,5 mm BASE P
   Trade code: 907MU0900

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use: Wall coating paste
Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet
Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano
   Tel: +39-02-376731
   Fax: +39-02-37673.214
   Responsible: sicurezza@mapei.it

1.4. Emergency telephone number
Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029
MAPEI S.p.A. - Tel. +(39)02376731 - (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
Special provisions according to Annex XVII of REACH and subsequent amendments:
   None

2.3. Other hazards
Other Hazards:
   No other hazards
   This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

Regulation (EC) n. 1272/2008 (CLP)
Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.
Adverse physicochemical, human health and environmental effects:
   No other hazards

Hazard statements:
   H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:
   P273 Avoid release to the environment.
   P501 Dispose of contents/container to ...

Contains:
   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
   No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
   N.A.
### 3.2. Mixtures

Mixture identification: MAPETHERM FLEX RP 1,5 mm BASE P

<table>
<thead>
<tr>
<th>Hazardous components within the meaning of the CLP regulation and related classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity</strong></td>
</tr>
<tr>
<td>≥0.1 - &lt;0.25 %</td>
</tr>
<tr>
<td>≥0.1 - &lt;0.25 %</td>
</tr>
<tr>
<td>≥0.025 - &lt;0.05 %</td>
</tr>
<tr>
<td>≥0.01 - &lt;0.016 %</td>
</tr>
<tr>
<td>≥0.005 - &lt;0.01 %</td>
</tr>
<tr>
<td>&lt;0.0015 %</td>
</tr>
<tr>
<td>&lt;0.0015 %</td>
</tr>
</tbody>
</table>

### 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:
- Wash immediately with water.

In case of Ingestion:
- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

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

N.A.

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

Treatment:
N.A.
(see paragraph 4.1)

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media:
- Water.
- Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:
None in particular.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for firefighters

Use suitable breathing apparatus.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand
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.
Contaminated clothing should be changed before entering eating areas.

Don’t 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.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

<table>
<thead>
<tr>
<th>Component</th>
<th>OEL Type</th>
<th>OEL</th>
<th>Country</th>
<th>Ceiling</th>
<th>Long Term</th>
<th>Long Term</th>
<th>Short Term</th>
<th>Short Term</th>
<th>Behaviour</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>free crystalline silica (Ø &lt;10 µ)(*)</td>
<td>National SWEDEN</td>
<td>0,1</td>
<td>National NORWAY</td>
<td>0,3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NDS POLAND</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NDS POLAND</td>
<td>0,3</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>National NORWAY</td>
<td>0,3</td>
<td></td>
<td>0,6</td>
<td></td>
<td></td>
<td>DENMARK, inhalable aerosol inhalable aerosol</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>National NORWAY</td>
<td>0,1</td>
<td></td>
<td>0,2</td>
<td></td>
<td></td>
<td>DENMARK, respirable aerosol respirable aerosol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>0,025</td>
<td>EU</td>
<td>0,025</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(R), A2 - Pulm fibrosis, lung cancer</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A2 (R) - Pulm fibrosis, lung cancer</td>
<td></td>
</tr>
<tr>
<td>ammonia, anhydrous</td>
<td>National SWEDEN</td>
<td>C</td>
<td>14</td>
<td>20</td>
<td>36</td>
<td>50</td>
<td></td>
<td>SWEDEN, Ceiling limit value, refers to a 5 minutes period.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>National NORWAY</td>
<td>11</td>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td>NORWAY, 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>National NORWAY</td>
<td></td>
<td></td>
<td>36</td>
<td>50</td>
<td></td>
<td>NORWAY, S</td>
<td></td>
</tr>
</tbody>
</table>
### 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:**
Suitable materials for safety gloves; EN 374:
- Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.
- Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.
- Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.
- Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.
Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

**Respiratory protection:**
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.

N.A.

**Hygienic and Technical measures**
N.A.

**Appropriate engineering controls:**
N.A.

### 9. Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- Appearance and colour: dense liquid various
- Odour: characteristic
- Odour threshold: N.A.
- pH: N.A.
- Melting point / freezing point: N.A.
- Initial boiling point and boiling range: N.A.
- Flash point: N.A.
- Evaporation rate: N.A.
- Upper/lower flammability or explosive limits: N.A.
- Vapour density: N.A.
- Vapour pressure: N.A.
- Relative density: N.A.
- Solubility in water: Soluble
9.2. Other information
No additional information

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
Toxicological information of the mixture:
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:
Polyethylene glycol monooleylether
a) acute toxicity
LD50 Oral Rat 2700 mg/kg

Pyrithione zinc
a) acute toxicity
LD50 Oral Rat = 269 mg/kg
LD50 Skin Rat > 2000 mg/kg
LC50 Inhalation Mist Rat = 1,03 mg/l 4h
e) germ cell mutagenicity
Mutagenesis Oral Rat = 1300 mg/kg

Free crystalline silica (Ø <10 µ)(*)
a) acute toxicity
LD50 Oral Rat = 500 mg/kg

Ammonia, anhydrous
a) acute toxicity
LD50 Oral Rat = 350 mg/kg
LC50 Inhalation Rat = 2000 ppm 4h

1,2-benzisothiazol-3(2H)- one
a) acute toxicity
LD50 Oral Mouse > 1150 mg/kg
LD50 Skin Mouse > 2000 mg/kg
LD50 Oral Rat > 597 mg/kg
b) skin corrosion/irritation
Skin Irritant Skin 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)
a) acute toxicity
LD50 Oral Rat = 53 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)

LD50 Oral Rat = 457 mg/kg

LC50 Inhalation Rat = 2,36 mg/l 4h

LD50 Skin Rabbit = 660 mg/kg

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
j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

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

Eco-Toxicological Information:

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of components with eco-toxicological properties

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
<th>Ident. Numb.</th>
<th>Ecotox Infos</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=0.1 - &lt;0.25 %</td>
<td>pyrithione zinc</td>
<td>CAS: 13463-41-7 - EINECS: 236-671-3</td>
<td>a) Aquatic acute toxicity : LC50 Fish = 0,0026 mg/L 96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : EC50 Daphnia = 0,0082 mg/L 48</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : EC50 Algae = 0,0012 mg/L 120</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : NOEC Algae = 0,00046 mg/L 120</td>
</tr>
<tr>
<td>&gt;=0.01 - &lt;0.016 %</td>
<td>ammonia, anhydrous</td>
<td>CAS: 7664-41-7 - EINECS: 231-635-3 - INDEX: 007-001-00-5</td>
<td>a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 44 mg/L 96h EPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 26 mg/L 96h IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 73 mg/L 96h IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata &gt; 15 mg/L 96h IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 254 mg/L 48h IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 117 mg/L 96h EPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 59 mg/L 96h EPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 119 mg/L 96h EPA</td>
</tr>
<tr>
<td>&gt;=0.005 - &lt;0.01 %</td>
<td>1,2-benzisothiazol-3(2H)-one</td>
<td>CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6</td>
<td>a) Aquatic acute toxicity : EC50 Daphnia = 2,44 mg/L 48</td>
</tr>
</tbody>
</table>

Date 4/15/2019  Production Name MAPETHERM FLEX RP 1,5 mm BASE P
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

No PBT/vPvB Ingredients are present

12.6. Other adverse effects

N.A.

**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.

**SECTION 14: Transport information**

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

**SECTION 15: Regulatory information**

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

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

PRODUCT REGISTER NUMBER : NA

MAL KODE: NA

Dir. 98/24/EC (Risks related to chemical agents at work)
German Water Hazard Class.

N.A.

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: 3, 40
Restrictions related to the substances contained: 28

SVHC Substances:

No Data Available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H221</td>
<td>Flammable gas.</td>
</tr>
<tr>
<td>H280</td>
<td>Contains gas under pressure; may explode if heated.</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed.</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled.</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Hazard class and hazard category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2/2</td>
<td>Flam. Gas 2</td>
<td>Flammable gas, Category 2</td>
</tr>
<tr>
<td>2.5</td>
<td>Press. Gas</td>
<td>Gases under pressure</td>
</tr>
<tr>
<td>3.1/3</td>
<td>Acute Tox. 3</td>
<td>Acute toxicity (inhalation), Category 3</td>
</tr>
<tr>
<td>3.1/3</td>
<td>Acute Tox. 3</td>
<td>Acute toxicity (oral), Category 3</td>
</tr>
<tr>
<td>3.2/1B</td>
<td>Skin Corr. 1B</td>
<td>Skin corrosion, Category 1B</td>
</tr>
<tr>
<td>3.2/2</td>
<td>Skin Irrit. 2</td>
<td>Skin irritation, Category 2</td>
</tr>
<tr>
<td>3.3/1</td>
<td>Eye Dam. 1</td>
<td>Serious eye damage, Category 1</td>
</tr>
<tr>
<td>3.9/1</td>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — repeated exposure, Category 1</td>
</tr>
<tr>
<td>4.1/A1</td>
<td>Aquatic Acute 1</td>
<td>Acute aquatic hazard, category 1</td>
</tr>
<tr>
<td>4.1/C1</td>
<td>Aquatic Chronic 1</td>
<td>Chronic (long term) aquatic hazard, category 1</td>
</tr>
<tr>
<td>4.1/C3</td>
<td>Aquatic Chronic 3</td>
<td>Chronic (long term) aquatic hazard, category 3</td>
</tr>
</tbody>
</table>

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):

Classification according to Regulation (EC) Nr. 1272/2008

<table>
<thead>
<tr>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Date 4/15/2019 Production Name MAPETHERM FLEX RP 1,5 mm BASE P
This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:
- ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
- SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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 SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:
- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
- AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ATE: Acute Toxicity Estimate
- ATEmix: Acute toxicity Estimate (Mixtures)
- BCF: Biological Concentration Factor
- BEI: Biological Exposure Index
- BOD: Biochemical Oxygen Demand
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- CAV: Poison Center
- CE: European Community
- CLP: Classification, Labeling, Packaging.
- CMR: Carcinogenic, Mutagenic and Reprotoxic
- COD: Chemical Oxygen Demand
- VOC: Volatile Organic Compound
- CSA: Chemical Safety Assessment
- CSR: Chemical Safety Report
- DMEL: Derived Minimal Effect Level
- DNEL: Derived No Effect Level.
- DPD: Dangerous Preparations Directive
- DSD: Dangerous Substances Directive
- EC50: Half Maximal Effective Concentration
- ECHA: European Chemicals Agency
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- ES: Exposure Scenario
- GefStoffV: Ordinance on Hazardous Substances, Germany.
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association.
- IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
- IC50: half maximal inhibitory concentration
- ICAO: International Civil Aviation Organization.
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
- IRCCS: Scientific Institute for Research, Hospitalization and Health Care
- Kst: Explosion coefficient.
- LC50: Lethal concentration, for 50 percent of test population.
- LD50: Lethal dose, for 50 percent of test population.
- LDLo: Leathal Dose Low
- N.A.: Not Applicable
- NA: Not available
- NIOSH: National Institute for Occupational Safety and Health
- NOAEL: No Observed Adverse Effect Level
- OSHA: Occupational Safety and Health Administration.
- PBT: Persistent, Bioaccumulative and Toxic
- PGK: Packaging Instruction
- PNEC: Predicted No Effect Concentration.
- PSG: Passengers
- RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
- 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).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.