Safety data sheet

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

1.1 Product identifier
COSMO SP-712.110
(COSMOFEN RM Fluid)

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses of the substance or mixture: Resin
Section 1.2(d)
SU22- Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

1.3 Details of the supplier of the safety data sheet
Waiss Chemie + Technik GmbH & Co.KG, Hansastrasse 2, 35708 Haiger, Germany
Phone: +49(0)2773/815-0, Fax: ---
msds@weiss-chemie.de, www.weiss-chemie.de
Qualified person’s e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de "Please DO NOT use for requesting Safety Data Sheets"

1.4 Emergency telephone number
Emergency information services / official advisory body:
+49 (0) 700 / 24 112 112 (WIC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) 1272/2008 (CLP)
Hazard class: 2
Hazard statement:
Flam. Liq. 2 H225-Highly flammable liquid and vapour.
STOT SE 3 H335-May cause respiratory irritation.
Skin Irrit. 2 H315-Causes skin irritation.
Skin Sens. 1 H317-May cause an allergic skin reaction.

2.2 Label elements
Labeling according to Regulation (EC) 1272/2008 (CLP)

SECTION 3: Composition/information on ingredients

3.1 Substance
n.a.

3.2 Mixture
Methyl methacrylate

SECTION 4: First aid measures

4.1 Description of first aid measures
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.
If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact
Dab away with polyethylene glycol 400
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap. In case of irritation of the skin (rash), consult a doctor.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Do not induce vomiting. Consult doctor immediately.

2.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. The following may occur:
Discoloration of the skin
Methaemoglobin formation

4.3 Indication of any immediate medical attention and special treatment needed
If skin, lips or finger nails are discoloured, perform artificial respiration with oxygen.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
CO2
Suitable extinguishing media
Water jet spraying
Alcohol-resistant foam
Unsuitable extinguishing media
High volume water jet

5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Toxic gases
Explosive vapour-air or gas-air mixtures

5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Keep non-essential personnel away.
Ensure sufficient supply of air.
Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping.

6.2 Environmental precautions
If leakage occurs, dam up.
Rescue leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up
Stabilize with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

6.4 Reference to other sections
For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in Section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations
Avoid inhalation of the vapours.
Ensure good ventilation.
If applicable, suction measures at the workstation or on the processing machine necessary.
Keep away from sources of ignition - Do not smoke.
Take measures against electrostatic charging, if appropriate.
Avoid contact with eyes or skin.

7.2 Other hazards
Avoid contact with eyes or skin.
Handle and open container with care.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

<table>
<thead>
<tr>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL-TWA 60 ppm (8h TWA) (WEL)</td>
</tr>
<tr>
<td>WEL-STEL 100 ppm (4h TWA)</td>
</tr>
</tbody>
</table>

#### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction. If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Suitable assessment methods for reviewing the effectiveness of protective measures are described in the following standards.

#### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

#### 8.3 Specific end use(s)

### SECTION 9: Physical and chemical properties

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

- **Physical state:** Liquid
- **Colour:** Blue
- **Odour:** Esterlike
- **Odor threshold:** Not determined
- **pH-value:** Not determined
- **Melting point/freezing point:** 48 °C
- **Boiling range:** > 100 °C
- **Flash point:** > 10 °C (DIN 51756 (Abel-Panekly, closed cup), Methyl methacrylate)

#### 9.2 Other information

- **Stability:** Not determined
- **Atmospheric stability:** Not determined
- **Water solubility:** > 1 g/100 g (WEL), 1 g/100 g (WEL)
- **Partition coefficient (n-octanol/water):** Not determined
- **Auto ignition temperature:** > 430 °C (DIN 51704, ignition temperature Methyl methacrylate)

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

The product has not been tested.

#### 10.2 Chemical stability

Stable with proper storage and handling.

#### 10.3 Possibility of hazardous reactions

Polymerisation possible with:

- Radical former (Initiators)
- Peroxides
- Heavy metal salts

#### 10.4 Conditions to avoid

- Heating, open flames, ignition sources
- Electrostatic charge

#### 10.5 Incompatible materials

- Avoid contact with strong oxidising agents.
- Avoid contact with strong alkalis.
- Avoid contact with strong acids.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

### COSMOS SP-712.110 (COSMOPEN RM Fluid)

#### 11.2.1 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep out of reach of children.

### 7.3 Specific end use(s)

Resin
### Methyl methacrylate

#### Toxicity / effect

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, by oral route:</td>
<td>LC50</td>
<td>4.69</td>
<td>mg/kg</td>
<td>Rat</td>
<td>OECD 401 (Acute Oral Toxicity)</td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td>LD50</td>
<td>&gt;1000</td>
<td>mg/kg</td>
<td>Rat</td>
<td>OECD 404 (Acute Dermal Toxicity)</td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>LC50</td>
<td>20.8</td>
<td>mg/l</td>
<td>Rat</td>
<td>OECD 404 (Acute Dermal Toxicity)</td>
</tr>
</tbody>
</table>

#### Skin corrosion/irritation:

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation:</td>
<td>Not irritant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin sensitisation:</td>
<td>Not sensitising</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 12: Ecological information

#### Toxicity / effect

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, by fish:</td>
<td>LC50</td>
<td>4.69</td>
<td>mg/l</td>
<td>Rat</td>
<td>OECD 401 (Acute Oral Toxicity)</td>
</tr>
<tr>
<td>Acute toxicity, by algae:</td>
<td>EC50</td>
<td>7.2</td>
<td>mg/l</td>
<td>Daphnia</td>
<td>OECD 203 (Acute Toxicity Test)</td>
</tr>
<tr>
<td>Acute toxicity, by daphnia:</td>
<td>EC50</td>
<td>7.2</td>
<td>mg/l</td>
<td>Daphnia</td>
<td>OECD 203 (Algae, Growth Inhibition Test)</td>
</tr>
<tr>
<td>Acute toxicity, by fish:</td>
<td>LC50</td>
<td>96h</td>
<td>mg/l</td>
<td>Daphnia</td>
<td>OECD 471 (Lethal Concentration - Reproduction)</td>
</tr>
</tbody>
</table>

#### Ecotoxicity:

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity:</td>
<td>Log Pow</td>
<td>1.32</td>
<td></td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>
### SECTION 14: Transport information

**General statements**

14.1 UN number: 1247

**Transport by road/bay rail (ADR/RID)**

14.2 UN proper shipping name: UN 1247 METHYL METHACRYLATE MONOMER, INHIBITED

14.3 Transport hazard class(es): 3

14.4 Packing group: II

Classification code: F1

LD0: 1 L

14.5 Environmental hazards:

Not applicable

Tunnel restriction code: 0/E

**Transport by sea (IMDG-code)**

14.2 UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED

14.3 Transport hazard class(es): 3

14.4 Packing group: II

14.5 Environmental hazards:

Not applicable

**Transport by air (IATA)**

14.2 UN (proper shipping name): Methyl methacrylate monomer, stabilized

14.3 Transport hazard class(es): 3

14.4 Packing group: II

**Special precautions for user**

Persons employed in transporting dangerous goods must be trained.

All persons involved in transporting must observe safety precautions. Precautions must be taken to prevent damage.

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

Freighted as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.

Comply with special provisions.

### SECTION 15: Regulatory information

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

Define:

- Observers
- Compliance
- Trade association/occupational health regulations.
- Comply with special provisions.

**15.2 Chemical safety assessment**

A chemical safety assessment is not provided for mixtures.

### SECTION 16: Other information

**Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EQ) 1272/2008 (CLP):**

- Flam. Liq. 2, H225 - Classification based on test data.

- STO1 2, 3, H335 - Classification according to calculation procedure.

- Skin Irrit. 2, H315 - Classification according to calculation procedure.

- Skin Sens. 1, H317 - Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

- H225 Highly flammable liquid and vapour.
- H303 Toxic if swallowed.
- H311 Toxic in contact with skin.
The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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