1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1 Product name: XIAMETER(R) RTV-3081-F SILICONE RUBBER CURING AGENT

1.2 Identified uses:
- Vulcanising agents
- Polymers

Uses advised against: None known.

1.3 Company: Dow Corning Europe S.A.
rue Jules Bordet - Parc Industriel - Zone C
B-7180 Seneffe
Belgium

E-mail address (Safety Data Sheet): sdseu@dowcorning.com

Customer Service:
- English: Tel: +49 611237507
- Français: Tel: +32 64511149

Fax: +49 611237601
Fax: +32 64888683

1.4 Emergency Phone Number:
- Dow Corning (Barry U.K. 24h): Tel: +44 1446732350
- Dow Corning (Wiesbaden 24h): Tel: +49 61122158
- Dow Corning (Seneffe 24h): Tel: +32 64 888240

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to EU Directives 67/548/EEC or 1999/45/EC:

- R20 Harmful by inhalation.
- R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- R63 Possible risk of harm to the unborn child.

2.2 Label elements

Labelling according to EEC Directive

Contains:
- Trimethoxyphenylsilane
- Dimethylbis[(1-oxoneodecyl)oxy]stannane
- Tetramethyl orthosilicate

Symbols: Xn Harmful.

R-phrases:
- R20 Harmful by inhalation.
- R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- R63 Possible risk of harm to the unborn child.
### S-phrases

- S2 Keep out of the reach of children.
- S23(V) Do not breathe vapour.
- S24 Avoid contact with skin.
- S36/37 Wear suitable protective clothing and gloves.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S51 Use only in well-ventilated areas.

### 2.3 Other hazards

Vapours may form explosive mixtures with air.
# XIAMETER(R) RTV-3081-F SILICONE RUBBER CURING AGENT

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### Chemical characterization:
Organotin compound

### According to EU Directives 67/548/EEC or 1999/45/EC:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>EINECS/ELINCS No.</th>
<th>REACH Registration Number</th>
<th>Conc. (% w/w)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trimethoxyphenylsilane</td>
<td>2996-92-1</td>
<td>221-066-9</td>
<td>-</td>
<td>11.0</td>
<td>Xn, R22, R48/22, Xi, R38</td>
</tr>
<tr>
<td>Dimethylbis[1-oxoneodecyl]oxy]stannane</td>
<td>68928-76-7</td>
<td>273-028-6</td>
<td>-</td>
<td>6.5</td>
<td>Xn, R22, T, R48/25, Xi, Toxic for reproduction - category 3, R63, R53</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>01-21194333 07-44</td>
<td>0.36</td>
<td>F, R11, T, R23/24/25, R39/23/24/25</td>
</tr>
<tr>
<td>Cyclohexyltrimethoxysilane</td>
<td>17865-54-2</td>
<td>Exempt or not available</td>
<td>-</td>
<td>0.24</td>
<td>N, R51/53, Xi, R38</td>
</tr>
<tr>
<td>Tetramethyl orthosilicate</td>
<td>681-84-5</td>
<td>211-656-4</td>
<td>-</td>
<td>&lt;=0.14</td>
<td>R10, Xi, R38, R41, T, R48/23, T+</td>
</tr>
</tbody>
</table>

### According to Regulation (EC) No. 1272/2008:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>EINECS/ELINCS No.</th>
<th>REACH Registration Number</th>
<th>Conc. (% w/w)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trimethoxyphenylsilane</td>
<td>2996-92-1</td>
<td>221-066-9</td>
<td>-</td>
<td>11.0</td>
<td>Acute toxicity (Oral): Category 4 - H302, Skin corrosion/irritation: Category 2 - H315, Specific target organ toxicity - repeated exposure (Oral): Category 2 (bladder, kidney) - H373</td>
</tr>
<tr>
<td>Dimethylbis[1-oxoneodecyl]oxy]stannane</td>
<td>68928-76-7</td>
<td>273-028-6</td>
<td>-</td>
<td>6.5</td>
<td>Acute toxicity (Oral): Category 4 - H302, Reproductive toxicity (Oral): Category 2 - H361d, Specific target organ toxicity - repeated exposure (Oral): Category 1 (central nervous system, thymus gland, kidney) - H372, Chronic aquatic hazard: Category 4 - H413</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>01-21194333 07-44</td>
<td>0.36</td>
<td>Flammable liquid: Category 2 - H225, Acute toxicity (Oral): Category 3 - H301, Acute toxicity (Dermal): Category 3 - H311</td>
</tr>
</tbody>
</table>

3 of 10
XIAMETER(R) RTV-3081-F SILICONE RUBBER CURING AGENT

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Exempt or not available</th>
<th>Skin corrosion/irritation</th>
<th>Chronic aquatic hazard</th>
<th>Acute toxicity (Inhalation - vapour):</th>
<th>Specific target organ toxicity - single exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexyltrimethoxysilane</td>
<td>17865-54-2</td>
<td>Exempt or not available</td>
<td>Category 2 - H315</td>
<td></td>
<td>Category 3 - H331</td>
<td>(Dermal): Category 1 (eye - retina, central nervous system) - H370</td>
</tr>
<tr>
<td>Tetramethyl orthosilicate</td>
<td>681-84-5</td>
<td>211-656-4</td>
<td>Exempt or not available</td>
<td></td>
<td>Exempt or not available</td>
<td>(Inhalation - vapour): Category 1 (eye - retina, central nervous system) - H370</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Inhalation - vapour): Category 1 (eye - retina, central nervous system) - H370</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Inhalation - vapour): Category 1 (eye - retina, central nervous system) - H370</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.
CLP classifications are based on all current available data including from known international organizations. These classifications are subject to revision as more information becomes available.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures:

- **On contact with eyes**: Flush with water.
- **On skin contact**: Wipe off and wash with soap and water. Obtain medical attention.
- **If inhaled**: Remove to fresh air. Obtain medical attention.
- **On ingestion**: Obtain medical attention immediately.

4.2 Most important symptoms/effects, acute and delayed:

- **Harmful by inhalation**: Harmful: danger of serious damage to health by prolonged exposure if swallowed. Possible risk of harm to the unborn child.
### 5. FIRE-FIGHTING MEASURES

<table>
<thead>
<tr>
<th>5.1 Suitable extinguishing media</th>
<th>On large fires use dry chemical, foam or water spray (fog). On small fires use carbon dioxide (CO2), dry chemical or water spray. Water can be used to cool fire exposed containers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>None known.</td>
</tr>
<tr>
<td>5.2 Hazards during fire fighting</td>
<td>Vapours may form explosive mixtures with air.</td>
</tr>
<tr>
<td>Hazardous Combustion Products</td>
<td>Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.</td>
</tr>
<tr>
<td>5.3 Special protective equipment/procedures</td>
<td>A self-contained respirator and protective clothing should be worn. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.</td>
</tr>
</tbody>
</table>

### 6. ACCIDENTAL RELEASE MEASURES

<table>
<thead>
<tr>
<th>6.1 Personal precautions, protective equipment and emergency procedures</th>
<th>Wear proper protective equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2 Environmental precautions</td>
<td>Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.</td>
</tr>
<tr>
<td>6.3 Methods and materials for containment and cleaning up</td>
<td>Determine the need to evacuate or isolate the area according to your local emergency plan. Very large spills should be contained by bunding, etc… procedures. Mop, wipe or soak up with absorbent material and place in a container with a lid. The spilled product produces an extremely slippery surface.</td>
</tr>
</tbody>
</table>

### 7. HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>7.1 Advice on safe handling</th>
<th>Avoid skin and eye contact. General ventilation is required. Local ventilation is required. Do not breathe vapour. Do not breathe spray or mist. Do not ingest. Do not empty into drains.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2 Advice on storage</td>
<td>Do not store with oxidizing agents. Vapours may form explosive mixtures with air. Storage temperature: minimum 5 °C, maximum 32 °C</td>
</tr>
<tr>
<td>7.3 Specific uses</td>
<td>Refer to technical data sheet available on request.</td>
</tr>
</tbody>
</table>

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**XIAMETER(R) RTV-3081-F SILICONE RUBBER CURING AGENT**

According to article 31 and Annex II of the EU REACH Regulation

Version: 1.0
Revision Date: 18.10.2011
Superseded date: -
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trimethoxyphenylsilane</td>
<td>2996-92-1</td>
<td>200 ppm TWA as methanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 ppm STEL as methanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>266 mg/m³ TWA as methanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>333 mg/m³ STEL as methanol</td>
</tr>
<tr>
<td>Dimethylbis(1-oxoneodecyl)oxy]stannane</td>
<td>68928-76-7</td>
<td>0.1 mg/m³ TWA as Sn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2 mg/m³ STEL as Sn</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>200 ppm TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 ppm STEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>266 mg/m³ TWA as methanol</td>
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<tr>
<td></td>
<td></td>
<td>333 mg/m³ STEL as methanol</td>
</tr>
<tr>
<td>Cyclohexyltrimethoxysilane</td>
<td>17865-54-2</td>
<td>200 ppm TWA as methanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 ppm STEL as methanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>266 mg/m³ TWA as methanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>333 mg/m³ STEL as methanol</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

**Engineering Controls**
Ventilation: Refer to Section 7.1

**Personal protection equipment**

**Respiratory protection**
Suitable respiratory protection should be worn if the product is used in large quantities, confined spaces or in other circumstances where the OEL may be approached or exceeded.

A suitable respirator must be worn if the product is used in any circumstances where an aerosol or mist may be generated, such as during spraying or similar activities.

Depending on the working conditions, wear a respiratory mask with filter(s) AXP or use a self-contained respirator.

The choice of a filter type depends on the amount and type of chemical being handled in the workplace. Regarding filter characteristics, contact your respiratory protection supplier.

**Hand protection**
Chemical protective gloves should be worn where repeated or prolonged contact can occur: Silver shield(TM). 4H(TM). Regarding glove's breakthrough time, contact your chemical protective glove supplier.

**Eye/face protection**
Safety goggles should be worn.

**Skin protection**
Wear impervious overalls in circumstances where significant skin contact can occur.

**Hygiene measures**
Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking. Remove contaminated clothing.
Additional information

These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these types of materials in consumer aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group.

Environmental exposure controls

Refer to section 6 and 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Colour

Clear to slightly hazy, colourless

Odour

Very little

Boiling point/range

> 35 °C

Flash point

64 °C (Pensky-Martens Closed Cup)

Explosive properties

No

Vapours may form explosive mixtures with air.

Specific Gravity

0.969

Viscosity

40 mPa s at 25°C.

Oxidizing properties

No

The above information is not intended for use in preparing product specifications.

10. STABILITY AND REACTIVITY

10.1 Reactivity

This product releases methanol.

10.2 Stability

Stable under normal usage conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

None established.

10.5 Materials to avoid

Can react with strong oxidising agents.

10.6 Hazardous decomposition products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.
XIAMETER(R) RTV-3081-F SILICONE RUBBER CURING AGENT

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

On contact with eyes : Slightly irritating.

On skin contact : Slightly irritating. Large amount in contact with significant skin surface areas may cause systemic adverse effects.

If inhaled : Harmful if inhaled. May cause dizziness, drowsiness, confusion, headaches, nausea, and at high concentrations, unconsciousness.

On ingestion : Forms methanol. Swallowing large amounts may cause systemic adverse effects and blindness. May cause slight mucous membranes irritation.

Chronic toxicity:

On skin contact : Suspected of damaging the unborn child. Can irritate on prolonged or repeated contact. Prolonged or repeated dermal contact may cause systemic adverse effect.

If inhaled : Suspected of damaging the unborn child. Prolonged or repeated inhalation may cause systemic adverse effects.

On ingestion : Suspected of damaging the unborn child. Repeated swallowing may cause damage to specific organ(s) - see section 3.

Toxicokinetics, metabolism and distribution : Dangerous amounts can be absorbed through the skin.

1 Based on product test data.
2 Based on test data from similar products.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity effects

This product contains substances which may cause adverse effects in the aquatic environment.

12.2 Persistence and degradability

This product hydrolyses in water or wet soil, releasing alcohols and silicic acid. This product hydrolyses in water or moist air, releasing methanol and organosilicons.

12.3 Bioaccumulation

Organotin compounds can bioaccumulate.

12.4 Release to waters / Mobility in soil

Fate and effects in waste water treatment plants:

No adverse effects on bacteria are predicted.
13. DISPOSAL CONSIDERATIONS

**Product and packaging disposal**: Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

14. TRANSPORT INFORMATION

**Road / Rail (ADR/RID)**
Not subject to ADR/RID.

**Sea transport (IMDG)**
Not subject to IMDG code.

**Air transport (IATA)**
Not subject to IATA regulations.

15. REGULATORY INFORMATION

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

**Status**

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AICS</td>
<td>All ingredients listed, exempt or notified.</td>
</tr>
<tr>
<td>IECSC</td>
<td>All ingredients listed or exempt.</td>
</tr>
<tr>
<td>KECL</td>
<td>All ingredients listed, exempt or notified.</td>
</tr>
<tr>
<td>PICCS</td>
<td>All ingredients listed, exempt or notified.</td>
</tr>
<tr>
<td>DSL</td>
<td>All ingredients listed or exempt.</td>
</tr>
<tr>
<td>EINECS</td>
<td>All ingredients listed, exempt or notified (ELINCS).</td>
</tr>
<tr>
<td>TSCA</td>
<td>All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.</td>
</tr>
<tr>
<td>ENCS/ISHL</td>
<td>All ingredients listed, exempt or notified.</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

This product safety data sheet was prepared in compliance with article 31 and Annex II of the EU REACH Regulation as well as its relevant amendments, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Product Safety Data Sheet to their own Product Safety Data Sheet in compliance with article 31 and Annex II of the EU REACH Regulation.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. Dow Corning supplying entity shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.

As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary - even for the same product - between different countries, reflecting the different compliance requirements.

Source of information: Internal data and publically available information

| R10  | Flammable., R11 Highly flammable., R22 Harmful if swallowed., R23/24/25 Toxic by inhalation, in contact with skin and if swallowed., R26 Very toxic by inhalation., R38 Irritating to skin., R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed., R41 Risk of serious damage to eyes., R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed., R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation., R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed., R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment., R53 May cause long-term adverse effects in the aquatic environment., R63 Possible risk of harm to the unborn child. |

| H225  | Highly flammable liquid and vapour., H226 Flammable liquid and vapour., H301 Toxic if swallowed., H302 Harmful if swallowed., H311 Toxic in contact with skin., H315 Causes skin irritation., H318 Causes serious eye damage., H330 Fatal if inhaled., H331 Toxic if inhaled., H361d Suspected of damaging the unborn child., H411 Toxic to aquatic life with long lasting effects., H413 May cause long lasting harmful effects to aquatic life. |

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http://www.xiameter.com