1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Trade name: SILASTIC(R) N9162 FLIT PLUG ENCAPSULANT CATALYST (RF) (CATALYST information is below)

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

Service: Dow Corning Central Europe
Tel: +49 6112371
Fax: +49 611237609

Dow Corning Northern Europe
Tel: +44 1676528000
Fax: +44 1676528001

Dow Corning Southern Europe
Tel: +33 472841360
Fax: +33 472841379

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

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

Use of the substance/preparation:
Electrical and electronic applications
Vulcanising agents

2. HAZARDS IDENTIFICATION

The principal hazards of the product as supplied are:

Flammable.
Harmful by inhalation.
Irritating to eyes and respiratory system.

Vapours may form explosive mixtures with air.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Organosilane.

Hazardous Ingredients:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>EINECS/ ELINCS No.</th>
<th>Conc. (% w/w)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid (H4SiO4), tetraethyl ester, hydrolyzed</td>
<td>68412-37-3</td>
<td>270-184-7</td>
<td>45.0</td>
<td></td>
</tr>
<tr>
<td>Tetraethyl silicate</td>
<td>78-10-4</td>
<td>201-083-8</td>
<td>43.0</td>
<td>Xn R20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Xi R36/37</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R10</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

On contact with eyes : Immediately flush with water. If eye irritation persists, consult a specialist.

On skin contact : No first aid should be needed.

If inhaled : Remove to fresh air. Obtain medical attention.

On ingestion : Obtain medical attention if large amounts have been swallowed.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media : 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.

Unsuitable extinguishing media : None known.

Hazards during fire fighting : Electrostatic charges may be generated during transfer of product from its container. Ensure that all equipment is electrically earthed. Vapours may form explosive mixtures with air.

Special protective equipment/procedures : 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.

Hazardous Combustion 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. Nitrogen products.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear proper protective equipment.

Precautions to protect the environment : Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
According to article 31 and Annex II of the EU REACH Regulation

**PRODUCT SAFETY DATA SHEET**

**SILASTIC(R) N9162 FLIT PLUG ENCAPSULANT CATALYST (RF) (CATALYST information is below)**

**Methods for cleaning up**: Determine the need to evacuate or isolate the area according to your local emergency plan. Eliminate all possible sources of ignition. 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.

### 7. HANDLING AND STORAGE

**Advice on safe handling**: Avoid eye contact. General ventilation is required. Local ventilation is required. Do not breathe vapour. Do not breathe spray or mist.

**Advice on storage**: Store in a flameproof, well ventilated area. Electrostatic charges may be generated during transfer of product from its container. Ensure that all equipment is electrically earthed. Keep container tightly closed.

**Vapours may form explosive mixtures with air.**

**Specific uses**: Refer to technical data sheet available on request.

**Unsuitable packaging materials**: None known.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls**: Ventilation : Refer to Section 7

**Exposure controls for hazardous components**

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid (H4SiO4), tetraethyl ester, hydrolyzed</td>
<td>68412-37-3</td>
<td>1,000 ppm TWA as ethanol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,920 mg/m³ TWA as ethanol</td>
</tr>
<tr>
<td>Dimethylbis[(1-oxoneodecyl)oxy]stannane</td>
<td>68928-76-7</td>
<td>0.2 mg/m³ STEL as Sn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³ TWA as Sn</td>
</tr>
<tr>
<td>1,4-Bis(Butylamino)Anthraquinone</td>
<td>17354-14-2</td>
<td>4 mg/m³ TWA Respirable dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³ TWA Inhalable dust</td>
</tr>
</tbody>
</table>

**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) AP 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**: Gloves are not normally required.

**Eye protection**: Face shield or safety goggles.

**Skin protection**: Protective equipment is not normally necessary.

**Hygiene measures**: Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

**Environmental exposure controls**: Refer to section 6 and 12.

**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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**

<table>
<thead>
<tr>
<th>Form</th>
<th>Colour</th>
<th>Odour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Blue</td>
<td>Alcoholic</td>
</tr>
</tbody>
</table>

**Important health, safety and environmental information**

- **Boiling point/range**: > 100 °C
- **Flash point**: 25 °C (Tag Closed Cup)
- **Explosive properties**: No. Vapours may form explosive mixtures with air.
- **Specific Gravity**: 1.01
- **Viscosity**: 3.5 mPa s at 25°C.
- **Oxidizing properties**: No
PRODUCT SAFETY DATA SHEET
According to article 31 and Annex II of the EU REACH Regulation

SILASTIC(R) N9162 FLIT PLUG ENCAPSULANT CATALYST (RF) (CATALYST information is below)

The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

Stability: Stable under normal usage conditions.
Conditions to avoid: None established.
Materials to avoid: Can react with strong oxidising agents.
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. Nitrogen products.

11. TOXICOLOGICAL INFORMATION

On contact with eyes: Irritating.
On skin contact: No adverse effects are normally expected.
If inhaled: Harmful by inhalation of vapour. The vapour is irritating to the mouth, nose and throat.
On ingestion: Small amounts transferred to the mouth by fingers during use should not injure. Swallowing large amounts may cause digestive discomfort.

Other Health Hazard Information: This product contains (a) powder(s) hazardous by inhalation. This is not relevant to the current physical form of the product, which is not in a respirable form. Product may emit formaldehyde vapour at temperatures above 150°C in the presence of air. Formaldehyde vapour is a suspected carcinogen, toxic by inhalation and irritating to eyes and the respiratory system. Exposure limits should be strictly respected.

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

12. ECOLOGICAL INFORMATION

Environmental fate and distribution
This product hydrolyses in water or wet soil, releasing alcohols and silicic acid.

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

Bioaccumulation: Organotin compounds can bioaccumulate.

Fate and effects in waste water treatment plants
No adverse effects on bacteria are predicted.
13. DISPOSAL CONSIDERATIONS

<table>
<thead>
<tr>
<th>Product disposal</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging disposal</td>
<td>Dispose of in accordance with local regulations. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

**Road / Rail (ADR/RID)**

<table>
<thead>
<tr>
<th>UN No.</th>
<th>UN 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>FLAMMABLE LIQUID, N.O.S.(Tetraethyl orthosilicate / Ethanol)</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Labels</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sea transport (IMDG)**

<table>
<thead>
<tr>
<th>UN No.</th>
<th>UN 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>FLAMMABLE LIQUID, N.O.S.(Tetraethyl orthosilicate / Ethanol)</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Emergency Schedule (EmS)</td>
<td>F-E</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Dimethyltin Di-Neodecyl Ester</td>
</tr>
<tr>
<td>Labels</td>
<td>flammable liquid</td>
</tr>
</tbody>
</table>

**Air transport (IATA)**

<table>
<thead>
<tr>
<th>UN No.</th>
<th>UN 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>Flammable liquid, n.o.s.(Tetraethyl orthosilicate / Ethanol)</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
</tbody>
</table>
### Packing group
- III

### Labels
- Flammable Liquid

## 15. REGULATORY INFORMATION

### Labelling according to EEC Directive
- **Contains**: Tetraethyl silicate
- **Symbols**: Xn Harmful.
- **R-phrases**: R10 Flammable.  
  R20 Harmful by inhalation.  
  R36/37 Irritating to eyes and respiratory system.
- **S-phrases**: S23(V) Do not breathe vapour.  
  S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
  S51 Use only in well-ventilated areas.

### National legislation / regulations
- **Ozone depleting chemicals**: No ozone depleting chemicals are present or used in manufacture.
- **Status**
  - **EINECS**: All ingredients listed, exempt or notified (ELINCS).
  - **AICS**: All ingredients listed, exempt or notified.
  - **IECSC**: All ingredients listed or exempt.
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 Dow Corning product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Dow Corning 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 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 Dow Corning 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. Should you have any question, please refer to your local Dow Corning supplier.

**R10** Flammable., **R20** Harmful by inhalation., **R22** Harmful if swallowed., **R36/37** Irritating to eyes and respiratory system., **R48/22** Harmful: danger of serious damage to health by prolonged exposure if swallowed., **R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment., **R53** May cause long-term adverse effects in the aquatic environment.