

SAFETY DATA SHEET

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

Version: 2.1

Revision Date: 01.08.2011

Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**

- 1.1 Product name** : SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)
- 1.2 Identified uses** : Vulcanising agents
- 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
Deutsch Tel: +49 611237500
Français Tel: +32 64511149
Italiano Tel: +32 64511170
Español Tel: +32 64511163
- 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:

Not hazardous.

2.2 Label elements**Labelling according to EEC Directive**

- S-phrases** : S9 Keep container in a well-ventilated place.
S12 Do not keep the container sealed.
S16 Keep away from sources of ignition - no smoking.

2.3 Other hazards

Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air.

SAFETY DATA SHEET

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

Version: 2.1

Revision Date: 01.08.2011

Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Silicone resin solution.

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

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification
Dimethylvinylated and Trimethylated Silica	68988-89-6	Exempt or not available	-	12.0	Substance with a Community workplace exposure limit

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

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification
Dimethylvinylated and Trimethylated Silica	68988-89-6	Exempt or not available	-	12.0	Substance with a Community workplace exposure limit

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** : No first aid should be needed.
- On skin contact** : No first aid should be needed.
- If inhaled** : No first aid should be needed.
- On ingestion** : No first aid should be needed.

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media** : On large fires use AFFF alcohol compatible foam or water spray (fog). On small fires use AFFF alcohol compatible foam, CO₂ or water spray (fog). Water can be used to cool fire exposed containers. Most fire extinguishing media will cause hydrogen release. Thus, in poorly ventilated or confined spaces, the accumulation of hydrogen may result in flash fire or explosion if ignited. Applying foam may release flammable hydrogen gas that can be trapped under the foam.
- Unsuitable extinguishing media** : Dry powder. Do not allow extinguishing medium to contact container contents.
- 5.2 Hazards during fire fighting** : None known.

SAFETY DATA SHEET

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

Version: 2.1
 Revision Date: 01.08.2011
 Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)

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. Hydrogen.

5.3 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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures : Wear proper protective equipment.

6.2 Environmental precautions : Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.

6.3 Methods and materials for containment and cleaning up : 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 vented container. The spilled product produces an extremely slippery surface.

7. HANDLING AND STORAGE

7.1 Advice on safe handling : Avoid eye contact. Do not breathe spray or mist. General ventilation is required. Do not empty into drains.

7.2 Advice on storage : This product slowly evolves hydrogen on storage. Keep only in a vented container in a well ventilated area. Keep container closed and store away from water or moisture. Do not store in or use glass containers.
 Storage temperature: maximum 32 °C

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Name	CAS-No.	Exposure Limits
Dimethylvinylated and Trimethylated Silica	68988-89-6	4 mg/m3 TWA Respirable dust 10 mg/m3 TWA Inhalable dust

8.2 Exposure controls

Engineering Controls : Ventilation : Refer to Section 7.1

SAFETY DATA SHEET

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

Version: 2.1

Revision Date: 01.08.2011

Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)**Personal protection equipment**

- Respiratory protection** : 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) P 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/face protection** : Safety glasses should be worn.
- Skin protection** : Protective equipment is not normally necessary.
- Hygiene measures** : Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
- 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** : Colorless
- Odour** : Very little
- Boiling point/range** : > 100 °C
- Flash point** : > 101.1 °C (Closed Cup)
- Explosive properties** : No
Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air.
- Specific Gravity** : 1.03
- Viscosity** : 110 cSt at 25°C.

SAFETY DATA SHEET

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

Version: 2.1

Revision Date: 01.08.2011

Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)**Oxidizing properties** : No

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

10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : Hydrogen is liberated on contact with water, alcohols, acidic or basic materials, many metals or metallic compounds and can form explosive mixtures in air.
- 10.2 Stability** : Stable under normal usage conditions.
- 10.3 Possibility of hazardous reactions** : Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air.
- 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. Hydrogen.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:**

- On contact with eyes** : May cause temporary discomfort.
- On skin contact** : No adverse effects are normally expected.
- If inhaled** : No adverse effects are normally expected.
- On ingestion** : No adverse effects are normally expected.

Chronic toxicity:

- On skin contact** : No adverse effects are normally expected.
- If inhaled** : No adverse effects are normally expected.
- On ingestion** : No adverse effects are normally expected.

Toxicokinetics, metabolism and distribution : No specific information is available.

SAFETY DATA SHEET

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

Version: 2.1

Revision Date: 01.08.2011

Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)

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 180°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**12.1 Ecotoxicity effects**

No adverse effects on aquatic organisms.

12.2 Persistence and degradability

Siloxanes are removed from water by sedimentation or binding to sewage sludge. In soil, siloxanes are degraded.

12.3 Bioaccumulation

No bioaccumulation potential.

12.4 Release to waters / Mobility in soil**Fate and effects in waste water treatment plants:**

Removed > 90% by binding onto sewage sludge. No adverse effects on bacteria. The siloxanes in this product do not contribute to the BOD.

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.

SAFETY DATA SHEET

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

Version: 2.1

Revision Date: 01.08.2011

Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)**Air transport (IATA)**

Not subject to IATA regulations.

Remarks : VENTED PACKAGES ARE FORBIDDEN FOR AIR TRANSPORT.**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Status****AICS** : All ingredients listed, exempt or notified.**DSL** : All ingredients listed or exempt.**IECSC** : All ingredients listed or exempt.**EINECS** : All ingredients listed, exempt or notified (ELINCS).**ENCS/ISHL** : All ingredients listed, exempt or notified.**KECL** : All ingredients listed, exempt or notified.**PICCS** : All ingredients listed, exempt or notified.**TSCA** : All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SAFETY DATA SHEET

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

Version: 2.1

Revision Date: 01.08.2011

Superseded date: 01.08.2011

SYLGARD(R) 184 SILICONE ELASTOMER CURING AGENT (CURING AGENT information is below)**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 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.

Source of information: Internal data and publically available information