PRODUCT SAFETY DATA SHEET

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

Version: 2.0 Revision Date: 28.05.2010

DOW CORNING(R) SE 4420

. IDENTIFICATION OF THE	SUI	STANCE/PREPARATION AND	OF THE COMPANY
Trade name	:	DOW CORNING(R) SE 4420	
Company	:	Dow Corning Europe S.A. rue Jules Bordet - Parc Industriel - Z B-7180 Seneffe Belgium	Zone C
Service	:	Dow Corning (Wiesbaden)	Tel: +49 611237507 Fax: +49 611237601
		Dow Corning (Seneffe)	Tel: +32 64511156 Fax: +32 64888683
Emergency Phone Number	:	Dow Corning (Barry U.K. 24h) Dow Corning (Wiesbaden 24h) Dow Corning (Seneffe 24h)	Tel: +44 1446732350 Tel: +49 61122158 Tel: +32 64 888240
E-mail address (Safety Data Sheet)	:	sdseu@dowcorning.com	
Use of the substance/preparation	:	Adhesive, binding agents	

2. HAZARDS IDENTIFICATION

The principal hazards of the product as supplied are:

Flammable. May cause sensitization by skin contact.

Vapours may form explosive mixtures with air.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Silicone

Hazardous Ingredients:

Name	CAS-No.	EINECS/ ELINCS No.	Conc. (% w/w)	Classification	
Aluminium oxide	1344-28-1	215-691-6	72.0		
Trimethoxy(methyl)silane	1185-55-3	214-685-0	2.0	F	R11 R43

4. FIRST AID MEASURES		
On contact with eyes	:	No first aid should be needed.
On skin contact	:	Flush with water. Wipe off. Obtain medical attention.
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If inhaled	:	No first aid should be needed.
On ingestion	:	No first aid should be needed.

5. FIRE-FIGHTING MEASURI	ES	
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.

6. ACCIDENTAL RELEASE N	1EA	SURES
Personal precautions	:	Wear proper protective equipment.
Environmental precautions	:	Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
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 STORA	GE	
Advice on safe handling	:	Local ventilation is recommended. General ventilation is recommended. Avoid skin and eye contact. 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.

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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 ٠ Exposure controls for hazardous components CAS-No. Name **Exposure Limits** Aluminium oxide 1344-28-1 4 mg/m3 TWA Respirable dust 10 mg/m3 TWA Inhalable dust 2 mg/m3 TWA Trimethoxy(methyl)silane 1185-55-3 50 ppm (8h TWA) - Dow Corning recommendation. **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 or gauntlets should be worn and removed correctly to avoid skin contamination: Silver shield(TM). 4H(TM). Regarding glove's breakthrough time, contact your chemical protective glove supplier. Safety glasses should be worn. Eye protection : 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 immediately. Refer to section 6 and 12. **Environmental exposure** ٠ controls

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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 Form: Viscous Liquid **Colour:** White **Odour:** Slight Important health, safety and environmental information $> 100 \ ^{\circ}C$ **Boiling point/range** : Flash point 43 °C (Seta Closed Cup) : No **Explosive properties** : Vapours may form explosive mixtures with air. **Specific Gravity** 2.25 : 800 Poise at 25°C. Viscosity : **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

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.

11. TOXICOLOGICAL INF	ORMA	TION
On contact with eyes	:	May cause temporary discomfort.
On skin contact	:	Repeated contact can cause sensitisation and allergic dermatitis.
If inhaled	:	No adverse effects are normally expected.

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On ingestion	:	No adverse effects are normally expected.
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 o 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 da	ata	

2 Based on test data from similar products.

12. ECOLOGICAL INFORMATION

Environmental fate and distribution

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

Ecotoxicity effects

No adverse effects on aquatic organisms.

Bioaccumulation

No bioaccumulation potential. :

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.

Additional environmental information

Additional environmental information on the silicone component is available on request.

13. DISPOSAL CONSIDE	RATION	S
Product 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.
Packaging disposal	:	Dispose of in accordance with local regulations. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

14. TRANSPORT INFORMATION		
<u>Road / Rail (ADR/RID)</u>		
UN No.	: UN 1993	
Proper Shipping Name	: FLAMMABLE LIQUID, N.O.S.(Methyltrimethoxysilane)	

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Class	: 3
Packing group	: III
Labels	: 3
<u>Sea transport (IMDG)</u>	
UN No.	: UN 1993
Proper Shipping Name	: FLAMMABLE LIQUID, N.O.S.(Methyltrimethoxysilane)
Class	: 3
Packing group	: III
Emergency Schedule (EmS)	: F-E S-E
Labels	: flammable liquid
<u>Air transport (IATA)</u>	
UN No.	: UN 1993
Proper Shipping Name	: Flammable liquid, n.o.s.(Methyltrimethoxysilane)
Class	: 3
Packing group	: III
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Labels	: Flammable Liquid

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	o EEC Directive
Contains	: Trimethoxy(methyl)silane
Symbols	: Xi Irritant.
R-phrases	: R10 Flammable. R43 May cause sensitization by skin contact.
S-phrases	 S23(V) Do not breathe vapour. S24 Avoid contact with skin. S37 Wear suitable gloves. S51 Use only in well-ventilated areas.
National legislation / 1	regulations
Ozone depleting chemicals	: No ozone depleting chemicals are present or used in manufacture.
<u>Status</u>	
EINECS	: All ingredients listed or exempt.
TSCA	: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

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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 amendements, 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.

R11 Highly flammable., R43 May cause sensitization by skin contact.