According to EC directive 91/155/EEC and subsequent amendments

Version: 1.2 Revision Date: 18.04.2003

SYLGARD(R) 182 SILICONE ELASTOMER KIT (BASE information is below)

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Trade name	:	SYLGARD(R) 182 SILICONE ELASTOMER KIT (BASE information is below)		
Company	:	Dow Corning S.A. 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) Dow Corning (Wiesbaden 24h) Dow Corning (Seneffe 24h)	Tel: +44 1446732350 Tel: +49 61122158 Tel: +32 64 888240	

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Silicone

Hazardous Ingredients:

Name	CAS-No.	EINECS/ ELINCS No.	Conc. (% w/w)	Classification	
Tetra(trimethylsiloxy)silane	3555-47-3	222-613-4	1.0	R53	

3. HAZARDS IDENTIFICATION

Not hazardous according to Council Directive 1999/45/EC and its subsequent amendments.

4. 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

According to EC directive 91/155/EEC and subsequent amendments

Version: 1.2 Revision Date: 18.04.2003

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SYLGARD(R) 182 SILICONE ELASTOMER KIT (BASE information is below)

Suitable extinguishing media	:	Carbon dioxide, foam, dry powder or fine water spray. Water can be used to cool fire exposed containers.
Unsuitable extinguishing media	:	None known.
Hazards during fire fighting	:	None known.
Special protective equipment/procedures	:	A self-contained respirator and protective clothing should be worn. Keep containers cool with water spray until well after the fire is out. Determine the need to evacuate or isolate the area according to your local emergency plan.
Hazardous Combustion Products	:	Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.

6. ACCIDENTAL RELEASE	MEA	SURES
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.
Methods for 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 container with a lid. The spilled product produces an extremely slippery surface.

7. HANDLING AND STORA	GE	
Advice on safe handling	:	Avoid eye contact. General ventilation is recommended.
Advice on storage	:	Do not store with oxidizing agents.
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

Name CAS-No. Exposure Limits

None of the components have assigned exposure limits.

According to EC directive 91/155/EEC and subsequent amendments

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SYLGARD(R) 182 SILICONE ELASTOMER KIT (BASE information is below)

Personal protection equipme	ent	
Respiratory protection	:	Respiratory protection is not normally required.
Hand protection	:	Gloves are not normally required.
Eye 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.
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 in consumer aerosol applications, please refer to the guidance document regarding the use of silicone-based 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** Liquid Colorless Very little Form: **Colour: Odour:** Other data **Boiling point/range** > 35C/95F : 93.3 °C (Pensky-Martens Closed Cup) **Flash point** : **Explosive properties** No : Not determined. **Specific Gravity** : 5000 cSt 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				
:	Stable under normal usage conditions.			
:	None established.			
:	Can react with strong oxidising agents.			
	:			

According to EC directive 91/155/EEC and subsequent amendments

Version: 1.2 Revision Date: 18.04.2003

SYLGARD(R) 182 SILICONE ELASTOMER KIT (BASE information is below)

Hazardous decomposition : See section 11. products

11. TOXICOLOGICAL INF	FORMA	TION
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.
Other Health Hazard Information	:	Product may emit formaldehyde vapours at temperatures above 150°C in the presence of air. Formaldehyde vapour is harmful by inhalation and irritating to eyes and respiratory system at breathing concentration less than one part per million (1 ppm).

¹ Based on product test data.

² Based on test data from similar products.

³ This information is based either on test data, extrapolation from tests on similar materials, review of component data, or a combination of these sources.

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 CONSIDER	ATION	8
Product disposal	:	Dispose of in accordance with local regulations.
Packaging disposal	:	Dispose of in accordance with local regulations.

SYLGARD(R) 182 SILICONE ELASTOMER KIT (BASE information is below)

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

Labelling according to EEC Directive

No special packaging or labelling requirements.

National legislation / 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.

SYLGARD(R) 182 SILICONE ELASTOMER KIT (BASE information is below)

16. OTHER INFORMATION

This product safety data sheet was prepared in compliance with Commission Directive 91/155/EEC, 67/548/EEC and 1999/45/EC as well as their 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 Commission Directive 1999/45/EC.

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.

R53 May cause long-term adverse effects in the aquatic environment.,

SYLGARD(R) 182 SILICONE ELASTOMER KIT (CURING AGENT information is below)

Trade name : SYLGARD(R) 182 SILICONE ELASTOMER KIT (CURING AGENT information i below) Company : Dow Corning S.A. Parc Industriel - Zone C B-7180 Seneffe Delawing B-18000000000000000000000000000000000000	1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY				
Parc Industriel - Zone C B-7180 Seneffe	Trade name		e name	ASTOMER KIT (CURING AGENT information is	
Beigium	Company	Parc Industriel - Zone C	pany		
Service : Dow Corning Central Europe Tel: +49 6112371 Fax: +49 611237609 Dow Corning Northern Europe Tel: +44 1676528000	Service		ce	Fax: +49 611237609	
Dow Corning Northern Europe Tel: +44 1676528000 Fax: +44 1676528001 Fax: +44 1676528001 Dow Corning Southern Europe Tel: +33 472841360 Fax: +33 472841379 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	Emergency Phone Number	Dow Corning Southern Europe Dow Corning (Barry U.K. 24h) Dow Corning (Wiesbaden 24h)	gency Phone Number	Fax: +44 1676528001 Tel: +33 472841360 Fax: +33 472841379 Tel: +44 1446732350 Tel: +49 61122158	

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Silicone resin solution.

Hazardous Ingredients:

Name	CAS-No.	EINECS/ ELINCS No.	Conc. (% w/w)	Classification	
Tetramethyltetravinylcyclotet rasiloxane	2554-06-5	Exempt or not available	2.0		R53

3. HAZARDS IDENTIFICATION

Not hazardous according to Council Directive 1999/45/EC and its subsequent amendments.

4. FIRST AID MEASURES		
On contact with eyes	:	No first aid should be needed.
On skin contact	:	No first aid should be needed.
If inhaled	:	Remove to fresh air.
On ingestion	:	No first aid should be needed.

5. FIRE FIGHTING MEASURES

SYLGARD(R) 182 SILICONE ELASTOMER KIT (CURING AGENT information is below)

Suitable extinguishing media	:	Carbon dioxide, foam or dry powder. Water can be used to cool fire exposed containers.
Unsuitable extinguishing media	:	None known.
Hazards during fire fighting	:	None known.
Special protective equipment/procedures	:	A self-contained respirator and protective clothing should be worn. Keep containers cool with water spray until well after the fire is out. Determine the need to evacuate or isolate the area according to your local emergency plan. Applying foam will also release significant amounts of flammable hydrogen gas that can be trapped under the foam blanket.
Hazardous Combustion Products	:	Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Hydrogen.

5. ACCIDENTAL RELEASE	MEA	SURES
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.
Methods for 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 STORA	GE	
Advice on safe handling	:	Avoid eye contact. General ventilation is recommended. Local ventilation is recommended.
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.
Specific uses	:	Refer to technical data sheet available on request.
Unsuitable packaging materials	:	Do not store in or use glass containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

:

Engineering Controls

Ventilation : Refer to Section 7

Exposure controls for hazardous components

According to EC directive 91/155/EEC and subsequent amendments

Version: 1.2 Revision Date: 18.04.2003

SYLGARD(R) 182 SILICONE ELASTOMER KIT (CURING AGENT information is below)

Name	CAS-No.	Exposure Limits			
None of the components have assigned exposure limits.					
Personal protection equipm	<u>ent</u>				
Respiratory protection	: Respirator	ry protection is not normally required.			
Hand protection	: Gloves are	e not normally required.			
Eye protection	: Safety glas	sses should be worn.			
Skin protection	: Protective	equipment is not normally necessary.			
Hygiene measures		good industrial hygiene practice. Wash after handling, especially before eating, or smoking.			
Environmental exposure controls	: Refer to se	ection 6 and 12.			
Additional information	aerosol/sp regarding guidance o application	cautions are for room temperature handling. Use at elevated temperature or ray applications may require added precautions. For further information the use of silicones in consumer aerosol applications, please refer to the document regarding the use of silicone-based materials in consumer aerosol ns that has been developed by the silicone industry (www.SEHSC.com) or e Dow Corning customer service group.			

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearan</u>	nce							
Form:	Liquid		Colour:	Colorless	Odour:	None		
<u>Other da</u>	<u>ta</u>							
Boiling p	oint/range	:	> 35C/95F					
Flash poi	nt	:	> 101.1 °C (Closed Cup)				
Explosive	e properties	:	No					
Specific (Gravity	:	1.03					
Viscosity		:	110 cSt at 2:	5°C.				
Oxidizing	g properties	:	No					
The above in	nformation is not inter	nded for use	in preparing pro	oduct specifications.	. Contact Dow Corning b	efore writing speci	ifications.	

10. STABILITY AND REACTIVITY

SYLGARD(R) 182 SILICONE ELASTOMER KIT (CURING AGENT information is below)

Stability	:	Stable under normal usage conditions.
Conditions to avoid	:	None established.
Materials to avoid	:	Hydrogen is liberated on contact with water, alcohols, acidic or basic materials, many metals or metallic compounds and can form explosive mixtures in air.
Hazardous decomposition products	:	See section 11.

11. TOXICOLOGICAL INFORMATION May cause temporary discomfort. On contact with eyes : 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. : **Other Health Hazard** Product may emit formaldehyde vapours at temperatures above 150°C in the presence of : Information air. Formaldehyde vapour is harmful by inhalation and irritating to eyes and respiratory system at breathing concentration less than one part per million (1 ppm). Recent results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. These effects occur at the highest exposure dose (700 ppm) only, a level that greatly exceeds typical workplace or consumer exposures. It is unlikely that industrial, commercial, or consumer uses of products containing D4 would result in a significant risk to humans.

¹ Based on product test data.

² Based on test data from similar products.

This information is based either on test data, extrapolation from tests on similar materials, review of component data, or a combination of these sources.

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

SYLGARD(R) 182 SILICONE ELASTOMER KIT (CURING AGENT information is below)

contribute to the BOD.

Additional environmental information

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

13. DISPOSAL CONSIDERATIONS

Product disposal: Dispose of in accordance with local regulations.

Packaging disposal:Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

Road / Rail (ADR/RID)

Not subject to ADR/RID.

Sea transport (IMDG)

Not subject to IMDG code.

Air transport (IATA)

NOT IATA REGULATED. (VENTED PACKAGES FORBIDDEN FOR AIR TRANSPORT)

15. REGULATORY INFORMATION

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.
National legislation / reg	ulations
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.

SYLGARD(R) 182 SILICONE ELASTOMER KIT (CURING AGENT information is below)

16. OTHER INFORMATION

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R53 May cause long-term adverse effects in the aquatic environment.,