

XIAMETER(R) SAFETY DATA SHEET

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

Version: 2.0
Revision Date: 13.02.2012
Superseded date: 20.09.2011

XIAMETER(R) RTV-3481 BASE (BASE information is below)

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

1.1 Product name : XIAMETER(R) RTV-3481 BASE (BASE information is below)

1.2 Identified uses : 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:

Not hazardous.

2.2 Label elements

Labelling according to EEC Directive

No special packaging or labelling requirements.

XIAMETER(R) SAFETY DATA SHEET

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

Version: 2.0
Revision Date: 13.02.2012
Superseded date: 20.09.2011

XIAMETER(R) RTV-3481 BASE (BASE information is below)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Silicone elastomer

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

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification
Trimethylated silica	68909-20-6	272-697-1	-	24.0	R66
Zircon	14940-68-2	239-019-6	-	11.0	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
Trimethylated silica	68909-20-6	272-697-1	-	24.0	Substance with a Community workplace exposure limit
Zircon	14940-68-2	239-019-6	-	11.0	Substance with a Community workplace exposure limit

For the full text of the R-phrases 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** : 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 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.
- 5.2 Hazards during fire fighting** : None known.
- 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

XIAMETER(R) SAFETY DATA SHEET

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

Version: 2.0
Revision Date: 13.02.2012
Superseded date: 20.09.2011

XIAMETER(R) RTV-3481 BASE (BASE information is below)

5.3 Special protective equipment/procedures : burned carbon compounds. Formaldehyde. Nitrogen products.
: 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 container with a lid. The spilled product produces an extremely slippery surface.

7. HANDLING AND STORAGE

- 7.1 Advice on safe handling** : General ventilation is recommended. Avoid eye contact. Do not breathe spray or mist. Do not empty into drains.
- 7.2 Advice on storage** : Do not store with oxidizing agents.
Storage temperature: minimum 5 °C, 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
Trimethylated silica	68909-20-6	4 mg/m ³ TWA Respirable dust 10 mg/m ³ TWA Inhalable dust
Zircon	14940-68-2	5 mg/m ³ TWA as Zr 10 mg/m ³ TWA as Zr

8.2 Exposure controls

Engineering Controls : Ventilation : Refer to Section 7.1

XIAMETER(R) SAFETY DATA SHEET

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

Version: 2.0
Revision Date: 13.02.2012
Superseded date: 20.09.2011

XIAMETER(R) RTV-3481 BASE (BASE 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** : Viscous Liquid
- Colour** : Off-White
- Odour** : None
- Boiling point/range** : > 65 °C
- Flash point** : > 100 °C (Closed Cup)
- Explosive properties** : No
- Specific Gravity** : 1.213
- Viscosity** : 34,000 mPa s at 25°C.
- Oxidizing properties** : No

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

XIAMETER(R) SAFETY DATA SHEET

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

Version: 2.0
Revision Date: 13.02.2012
Superseded date: 20.09.2011

XIAMETER(R) RTV-3481 BASE (BASE information is below)

10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : None known.
- 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. Nitrogen products.

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.

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.

¹ Based on product test data.

² Based on test data from similar products.

XIAMETER(R) SAFETY DATA SHEET

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

Version: 2.0
Revision Date: 13.02.2012
Superseded date: 20.09.2011

XIAMETER(R) RTV-3481 BASE (BASE information is below)

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.

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

XIAMETER(R) SAFETY DATA SHEET

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

Version: 2.0
Revision Date: 13.02.2012
Superseded date: 20.09.2011

XIAMETER(R) RTV-3481 BASE (BASE information is below)

EINECS	:	All ingredients listed, exempt or notified (ELINCS).
TSCA	:	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS	:	All ingredients listed, exempt or notified.
IECSC	:	All ingredients listed or exempt.
ENCs/ISHL	:	All ingredients listed, exempt or notified.
KECL	:	All ingredients listed, exempt or notified.
PICCS	:	All ingredients listed, exempt or notified.
DSL	:	All ingredients listed or exempt.

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

R66 Repeated exposure may cause skin dryness or cracking.,

XIAMETER(R) is a trademark of Dow Corning Corporation

<http://www.xiameter.com>

27/03/2007

PRODUCT SAFETY DATA SHEET

RESIN TOLERANT CURING AGENT - RTC 10

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Trade Name : Resin Tolerant Curing Agent RTC 10

Company : Thomson Bros (Newcastle) Ltd
 Mylord Crescent
 Camperdown Industrial Estate
 Killingworth
 Newcastle upon Tyne
 NE12 5UJ

Telephone No : 0191 2160397

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Organotin compound

Hazardous ingredients:

Name	CAS-No.	EINECS/ ELINCS No.	Conc. (% w/w)	Classification
Tetrapropyl orthosilicate	682-01-9	211-659-0	40.0	Xi R36/38
Trimethoxyphenylsilane	2996-92-1	221-066-9	11.0	Xn R22
Dimethylbis[(1-oxoneodecyl)Oxy]stannane	68928-76-7	273-028-6	2.0	Xn R22 R52/53
Methanol	67-56-1	200-659-6	0.37	F R11 T R36/23/24/25 R23/24/25
Cyclohexyltrimethoxysilane -		Exempt or Not available	0.25	N R51/53 Xn R22 Xi R38
Tetramethyl orthosilicate	681-84-5	211-656-4	<=0.14	T R25 R10 T+ R26

3. HAZARDS IDENTIFICATION

The principal hazards of the product as supplied are:

Harmful by inhalation
Irritating to eyes and skin.

Vapours may form explosive mixtures with air.

4. FIRST AID MEASURES

On contact with eyes	:	Immediately flush with water. If eye irritation persists, Consult a specialist.
On skin contact	:	Immediately flush with water. If skin irritation persists, Get medical attention.
If inhaled	:	Remove to fresh air. Obtain medical attention.
On ingestion	:	Obtain medical attention.

5. FIRE FIGHTING MEASURES

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	:	Vapours may form explosive mixtures with air.
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 Prods	:	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 MEASURES

Personal precautions	:	Wear proper protective equipment.
Precautions to protect 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 STORAGE

Advice on safe handling	:	Avoid eye contact. General ventilation is required. Local ventilation is required. Do not breathe vapour. Do not ingest.
Advice on storage	:	Do not store with oxidizing agents. Vapours may form Explosive mixtures with air.
Specific used	:	Refer to technical data sheet available on request.
Unsuitable packaging	:	None known

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls : Ventilation : Refer to Section 7.

Exposure controls for hazardous components

Name	CAS-No.	Exposure limits
Trimethoxyphenylsilane	2996-92-1	200 ppm TWA, 250 ppm STE; as methanol
Dimethylbis[(1-oxoneodecyl)Oxt]stannane	68928-76-7	0.2mg/m ³ STEL as Sn 0.1mg/m ³ TWA as Sn
Methanol	67-56-1	250ppm STEL 200ppm TWA 333mg/m ³ STEL 26mg/m ³ TWA
Cyclohexyltrimethoxysilane -		200ppm TWA, 250ppm STEL as methanol
Tetramethyl orthosilicate	681-84-5	5ppm STEL 1ppm TWA 32mg/m ³ STEL 6.3mg/m ³ TWA

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 full-face mask is recommended. Recommended Filter type: AX 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: Silver shield™. 4H™. Regarding glove's Breakthrough time..., contact your chemical Protective glove supplier.
Eye protection	:	Face shield or safety goggles.

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.
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 Thomson Bros customer service.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: Liquid **Colour:** Colourless to pale yellow **Odour:** Very little

Important health, safety and environmental information

Boiling point/range	:	>65°C
Flash point	:	66°C(Pensky-Martens Closed Cup)
Explosive properties	:	No Vapours may form explosive mixtures with air.
Specific gravity	:	0.962
Viscosity	:	40 mPa s at 25°C
Oxidising properties	:	No

10. STABILITY AND REACTIVITY

Stability	:	Stable under normal usage condition
Conditions to avoid	:	None established
Materials to avoid	:	Can react with strong oxidising agents. Cures in the Presence of water or moisture, releasing a small amount of methanol.
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 INFORMATION

On contact with eyes	:	Irritating
On skin contact	:	Irritating
If inhaled	:	Harmful by inhalation of vapour. May cause dizziness, drowsiness, confusion, headaches, nausea, and at high concentrations, unconsciousness.
On ingestion	:	Small amounts transferred to the mouth by fingers during use should not injure. Swallowing large amounts may cause digestive discomfort. Forms methanol and may cause serious injury to man at doses >200mg/kg.

12. ECOLOGICAL INFORMATION

Environmental fate and distribution

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.

Ecotoxicity effects

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

Boiaccumulation : Organotin compounds can bioaccumulate.

Fate and effects in waste water treatment plants

No adverse effects on bacteria are predicted.

13. DISPOSAL CONSIDERATIONS

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

Road/Rail (ADR/RID)

UN No. : UN 3082
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (Dimethyltin Di-Neodecyl Ester)
Class : 9
Packing group : III
Labels : 9

Sea Transport (IMDG)

UN No. : UN 3082
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.
Class : 9
Packing Group : III
Emergency Schedule (EmS) : F-A
S-F
Marine Pollutant : Dimethyltin Di-Neodecyl Ester
Labels : Miscellaneous

Air Transport (IATA)

Not subject to IATA regulations.

15. REGULATORY INFORMATION**Labelling according to EEC Directive**

Contains	:	Tetramethyl orthosilicate
Symbols	:	Xn harmful.
R-phrases	:	R20 harmful by inhalation R36/38 irritating to eyes and skin.
S-phrases	:	S2 keep out of the reach of children. S26 in case of contact with eyes, rinse immediately With plenty of water and seek medical advice. S37 wear suitable gloves. S46 if swallowed, seek medical advice immediately and Show this container or label. 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).

TCSA : All chemical substances in this material are included On or exempted from listing on the TSCA inventory of Chemical Substances.

MITI : All ingredients listed, exempt or notified.

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 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 Thomson Bros product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Thomson Bros 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. Thomson Bros 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 Thomson Bros 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 questions, please refer to Thomson Bros.

R10 Flammable. **R11** Highly flammable. **R22** Toxic by inhalation, in contact with skin and if swallowed., **R25** Toxic if swallowed, **R26** Very toxic by inhalation, **R36/38** irritating to eyes and respiratory system. **R38** Irritating to skin, **R39/23/24/25** Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed, **R51/53** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment, **R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.