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Safety data sheet/ EG-Sicherheitsdatenblatt

Date of establishment: 11/12/02

Revision date:

Product/ Product group: Rhodorsil moulding silicon

1.1 Substance/Preparation and Company Name

1.2 Information on the product

Trade name Rhodorsil RTV 585.

Moulding silicon, the article number is identical with the number for the hardening agent for the silicon.

1.2 Information on manufacturer/Supplier

Supplier: Tiffany Glaskunst GmbH
Street: Helleforthstr. 18-20

UIP Code/town: D-33758 Schloß Holte Stukenbrock

Tel.: +49 5207 91280
Fax.: +49 5207 912840
e-mail: tgk@tgk.de
Internet: http://www.tgk.de

Telephone number in emergency cases: 05207-9128-0

2. Composition/Information on ingredients:

Preparation based on polydimethylsiloxan and silicon oxyde.

3. Possible hazards:

The product has got a low degree of combustibility. In case of temperatures > 200 °C the formation of explosive product steam/air mixtures is possible.

Special hazards for humans and environment:

A slightly irritating effect on the eyes is possible.

4. First Aid Measures:

General information:

Remove contaminated clothes or shoes immediately.

Inhalation:

Fresh air, warmth. If discomfort persists, seek medical attention.

Eye contact:

Rinse eyes with opened palpepral fissure for several minutes under running water and seek medical attention.

Skin contact:

Dab affected areas with cotton wool or cellulose and wash thereafter thoroughly with water and a mild cleaning agent.

Ingestion:

If discomfort persists, seek medical attention.

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Necessary special measures for first aid:

No special measures known. Adapt treatment to symptoms.

4. <u>Fire fighting measures:</u>

Appropriate extinguishing media:

CO_{2,} extinguishing powder or water spray. Fight bigger fire with water spray or alcohol resistant foam.

Unadequate extinguising media for safety reasons:

No indication.

Special hazards by the material or the composition, its combustion products or generated gases:

The product is combustible. At combustion or thermic decomposition of the product, toxic and inflammable steam is released (exposion danger). Heating in closed containers increases pressure (danger of bursting).

Special protection equipment for fire fighting:

Wear independant respiratory protective equipment and protective clothes.

Additional information:

Collect contaminated extinguishing water separately, because it shall not pass into the canalisation. Cool containers exposed to fire with water spray.

6. Accidental release measures:

Personal precaution measures:

Provide for good ventilation/exhaustion at working place. Wear protective equipment. Keep unprotected persons away. Provide for eye washing bottles at working place.

Environmental protection measures:

Don't let pass into canalisation/ground water. Avoid extensive spreading (e.g. by damming up or oil barriers). Don't let pass into surface/earthsoil.

Measures for cleaning up/absorbing:

Take up with liquid-absorbing material (sand, kieselguhr, acid binding agent, universal binding agent, saw dust). Dispose of contaminated material as waste according to section 13. Recycle resp. dispose of it in appropriate containers. Dam up greater quantities and pump into containers. Wash away residues with plenty of water.

Additional information:

There is not released any dangerous material.

7. <u>Handling and Storage:</u>

Handling:

Information for secure handling:

Keep containers firmly locked. Provide for good ventilation/exhaustion at working place. Provide for eye washing bottles at working place.

Information on fire and explosion protection:

Adhere to general rules for preventive fire protection at work.

Storage:

Requirements for storage rooms and containers:

Avoid passing into canalisation, ground or water. Use only containers that are specifically authorised for the product. Adhere to national guidelines according to the country for storing of materials with a low water hazard class.

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Information on storage together with other products:

According to the specific legislation.

Additional information on storage conditions:

Keep containers firmly locked and store in dry condition.

VCI storage class:

10

8. Exposure controls and personal protection:

Additional information on design of technical plants:

Control room concerning ethanol level.

Ingredients with limit values on working place which have to be controlled:

CAS-No.	Desination of the material		Value	Unity
64-17-5	Ethanol	MAK	1900; 1000	mg/m³; ml/m³

General information resp. protection and hygiene measures:

Avoid contact with skin and eyes. Keep away from food, drinks and fodder. Remove contaminated and soaked clothes immediately. Provice for careful skin cleaning after work and before breaks. Adhere to general precaution measures for handling of chemicals. Don't rub with contaminated hand in the eyes.

Respiratory protection:

In case of insufficient ventilation use respiratory protective equipment.

Hand protection:

Protection gloves.

Eye protection:

Protection goggles with side-shield.

Body protection:

Protective working clothes.

9. Physical and chemical properties:

Aggregate state: liquid, viscousColour: beige

Odour: odourless/weak
 pH-value: no data available
 Boiling point/Boiling range (in °C): not specified

Flaming point: > 200 °C
 Ignition temperature: > 400 °C
 Specific gravity at 20 °C: ca. 1,22 g/cm³
 Steam pressure at 20 °C: < 0,1 hPa

Solubility in water: no, resp. low solubility
 Explosion danger: the product is not explosive

Viscosity at 20 °C: 50000 mPas

10. Stability and Reactivity:

Conditions to avoid/thermic decomposition:

No decomposition in case of appropriate utilisation. Avoid processing in insufficient ventilated rooms.

Products to avoid:

Strong oxidation agents.

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Dangerous decompositon products

At combustion or thermic decomposition of the product, carbon monoxide, carbon dioxide, silicon dioxyde and combustible steams are generated (explosion danger).

11. Information on toxicology:

Toxicologic tests:

Component		Value	Species
Polydimethylsiloxan	Oral	> 5000	Rat
	Dermal	> 2000	Rat

Primary irritating effects:

Skin:

Due to degreasing effect, damage possible in case of long-term contact.

Eyes:

Low irritating effect.

Sensibilisation:

No data available.

Additional toxicological information:

In case of appropriate handling and utilisation the product does not cause any effects hazardous for the health according to manufacturer's experience and our information. The product has not to be marked according to current EC lists.

12. <u>Information on ecology</u>:

Information to elimination (persistence and biodegradability):

The product has a low degree of biodegradability, bioaccumulation and solubility. It has a high sedimentation rate.

Additional information:

Do not let pass into environment. Decant and clear contaminated sewage before passing into the canalisation.

Water hazard class (self-assessment of the manufacturer)

1 (weak)

Do not let it pass undilutedly or in greater quantities in ground water, waters oder canalisation.

13. <u>Information on waste disposal:</u>

For the material/residues

Recommendation:

Has to be disposed of according to regional official regulations. Special waste combustion.

Waste no.:

55903, resin residues, not hardened.

For contaminated packing:

Disposal according to regional official regulations.

14. Information on Transport:

Not dangerous for transport according to transport regulations.

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15. Regulations:

The usual guidelines concerning handling of chemicals have to be adhered to.

Marking according to EC guideline:

The product has not to be marked according to EC lists or other known literature sources.

Symbol and Hazard designation of the product:

The product has not to be marked according to EC guideline/GefStoffV-

Water hazard class (self-assessment of the manufacturer):

1 (weak water hazard.)

16. <u>Additional Information:</u>

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.

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Safety data sheet/ EG-Sicherheitsdatenblatt

Date of establishment: 1

11/12/02

Revision date:

Product/ Product group: Rhodorsil Catalyst

1.3 Substance/Preparation and Company Name

1.2 Information on the product

Attention: Silicon and catalyst are not dangerous for transport according to transport regulations.

1.4 Information on manufacturer/Supplier

Supplier: Tiffany Glaskunst GmbH Street: Helleforthstr. 18-20

UIP Code/town: D-33758 Schloß Holte Stukenbrock

Tel.: +49 5207 91280 Fax.: +49 5207 912840 e-mail: tgk@tgk.de Internet: http://www.tgk.de

Telephone number in emergency cases: 05207-9128-0

2. <u>Composition/Information on ingredients:</u>

Composition of a polyorganosiloxan, an organic silicate and 5,5 % of an organo-tin-composition.

The compound contains 0.75 - 0.95 % tin.

Hazardous ingredients:

CAS-No.	Designation	Weight %			
870-08-6	Dioctyle tin oxide	6,0			

3. <u>Possible hazards:</u>

Special hazard information for humans and environment:

None.

Classification system:

The classification corresponds the the valid EC lists and is complemented by information taken from the specific literature and information supplied by the manufacturer.

Additional information:

The product has a low irritating effect on eyes and skin. It is combustible. In case of temperatures of $> 115^{\circ}$ C, explosive product vapour/air mixtures can be generated.

4. First aid measures:

Inhalation:

Bring affected person to fresh air and let him rest. Supply of fresh air or oxygen, seek medical attention. Product: Rhodorsil , Art. No. 3566750 Page 7 of 10
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Eye contact:

Wash eyes with opened palpepral fissure for at least 15 minutes under running water and seek medical attention.

Skin contact:

Remove product residues with dry cloth. Wash affected areas with water and soap and rinse thoroughly. Change strongly contaminated clothes and, if necessary, also shoes. Clean them before using them again.

Ingestion:

Do not induce vomiting, seek medical attention immediately. Give affected person in no case anything to drink!

5. <u>Fire fighting measures:</u>

Appropriate extinguishing media:

C0₂, extinguishing powder oder water spray. Fight greater fire with water spray oder alcohol resistant foam.

Unadequate extinguising media for safety reasons:

Full water jet.

Special hazards by the material or the composition, its combustion products or generated gases:

Combustion of the product generates silicium dioxide, carbon monoxide, carbon dioxide and tin oxide; Thermic decomposition releases vapours that are irrritating and dangerous for the health. Heating increases pressure at closed containers (bursting danger!)

Special protection equipment for fire fighting:

Wear independant respiratory protection equipment and protection clothes.

Combustion residues and contaminated extinguishing water have to be disposed of according to official regulations.

6. <u>Accidental release measures:</u>

Personal precaution measures:

Wear protection clothes. Keep unprotected persons away.

Provide for sufficient ventilation.

Do not inhale glass/smoke/vapour/aerosol.

Avoid contact with eyes and skin.

Environmental protection measures:

Avoid spreading on greater surfaces e.g. by damming up or oil barriers).

Do not let pass into canalisation/surface water/ground water.

Do not let pass into underground / earth soil.

Measures for cleaning up/absorbing:

Take up with liquid-binding material (sand, kieselguhr, acid binding agent, universal binding agent, saw dust)

Dispose of contaminated material as waste according to section 13.

Provide for sufficient ventilation.

Recycle or dispose of it in appropriate containers.

7. <u>Handling and storage:</u>

Handling:

Information for secure handling:

Keep container firmly locked.

Proviede for good ventilation/exhaustion at working place.

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Open and handle container with care. Avoid contact with eyes and skin.

Storage:

Requirements for storage rooms and containers:

Take measure against electrostatic charging.

Use devices/armatures protected against explosion and tools that do not emit sparks (in case of thermic product processing).

Use only containers that are specifically authorised for the product.

Information on storage together with other product:

According to legal requirements.

Additional information:

Store in closed container in cool and dry condition. Protect against heat and direct sun irradiation.

VCI storage class: 10

8. Exposure controls and personal protection:

Additional information on design of technical plants:

No additional information, refer to section 7.

Ingredients with limit values on working place which have to be controlled:

64-17-5 ethanol

MAK: 1900 mg/m³, 1000 ml/m³

Peak limitation, Cat IV

Peak limitaion category:

MAK (dioctyle tin compound): 0,1 mg/m3 (measured as fine dust) peak limitation Cat. II, 1; Reference H.

Pregnancy group:

D (Ethanol)

General protection and hygiene measures:

Adhere to usual protection measures for handling of chemicals.

Keep away from food, drinks and fodder.

Remove contaminated, soaked clothes immediately.

Wash hands before breaks and at end of work.

Do not inhale gas/vapours/aerosols.

Avoid contact with eyes and skin.

Respiratory protection:

In case of insufficient ventilation respiratory protection equipment.

Filter AX.

Gas filter DIN 3181 A1

Hand protection:

Protection gloves.

Rubber gloves.

Eye protection:

Protection goggles.

Body protection:

Protective working clothes.

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10. Physical and chemical properties:

Aggregate state: liquidColour: orangeOdour: etheral

Boiling point/Boiling range (in °C): not specified
 Meltingpoint/Melting range (in °C): not specified
 Flaming point: 115° C
 Specific gravity at 25°C: 1,010 g/cm³
 Solubility in water: insoluble

• Explosion danger: the product is not explosive itself, but the

generation of explosive vapour/air

mixtures is possible.

Decomposition temperature: > 200° C
 Viscosity dynamic at 20° C: ca. 20 mm²/s

10. Stability and reactivity:

Conditions to avoid/thermic decomposition:

Moisture.

Products to avoid:

Oxydating agents.

Moisture (hydrolysis generating ethanol and dibutyle tin oxide)

Dangerous decompositon products:

Silicium dioxide, carbonoxide, tinoxide (in case of thermic decomposition)

11. <u>Information on Toxicology:</u>

LD/LC50 values relevant for classification:

870-08-6 dioctyle tin oxide oral: LD 50: > 2000 mg/kg (rat)

Primary irritant effect:

Skin:

Irritation possible

Sensibilisation:

No sensibilisating effects known.

Additional toxicological information:

According to the classification system of the current General EC classification guideline for preparations, the product is classified as: dangerous for the health irritating

12. <u>Information on ecology</u>:

Ecotoxic effects:

Test start Concentration

Daphnia magna 0,66 mg/l/24 h EC 50

General ecological information:

Do not let pass into environment. Decant and clear contaminated sewage before passing into the canalisation.

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Additional ecological information:

The product has not been classified yet by the Commission for assessing the water hazard class for products. Up to then the product has to be regarded as having a strong water hazard (WGK 3)

13. <u>Information on waste disposal:</u>

For the material/residues and for contaminated packing:

Has to be disposed of according to official regulations.

14. <u>Information on transport</u>:

Not dangerous for transport according to transport regulations.

15. Regulations:

Marking according to EC guideline:

The product has been marked according to EC guidelne/GefStoffV.

Water hazard class:

Not officially classified up to now.

16. <u>Additional Information</u>:

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.