

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name: HR397 - HR397T

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: Used for making joints, sealing and gluing.

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet:

Supplier:

FEDERAL-MOGUL GLOBAL
AFTERMARKET EMEA BVBA
Prins Boudewijnlaan 5 B-2550
Kontich

Telephone: +32 (0) 3 450 83 10

Fax: +32 (0) 3 451 97 00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.:

Health Hazards:

Serious eye irritation Category 2 Causes serious eye irritation.

Hazard summary:

Physical Hazards: During curing, the product will release small quantities of irritating vapors.

Health Hazards:

Inhalation: No specific symptoms noted.

Eye contact: Causes serious eye irritation.

Skin Contact: No specific symptoms noted.

Ingestion: No specific symptoms noted.

Other Health Effects: No other information noted.

Environmental hazards: Not regarded as dangerous for the environment.

2.2 Label Elements:**Signal Words:** Warning**Hazard Statement(s):** Causes serious eye irritation.**Precautionary Statement:****Prevention:** Wear protective gloves/protective clothing/eye protection/face protection.**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.**2.3 Other hazards:** No data available.**Substance(s) formed under the conditions of use:**

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	INDEX No.
acetic acid...%	<3%	64-19-7	200-580-7		#

SECTION 3: Composition/information on ingredients**3.2 Mixtures:****General information:** Mixture of polydimethylsiloxanes, silica and curing agents.

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	Notes
Methylsilanetriyl triacetate	<3%	4253-34-3			
octamethylcyclotetrasiloxane	<3%	556-67-2	209-136-7	01-2119529238-36-0002	#
acetic acid...%	<1%	64-19-7	200-580-7		#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#: # This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification:

Chemical name	Classification		Notes
Methylsilanetriyl triacetate	DSD:	C; R34 Xn; R22	
	CLP:	Acute Tox. 4;H302, Skin Corr. 1C;H314	
octamethylcyclotetrasiloxane	DSD:	R53 Repr. 3; R62	
	CLP:	Repr. 2;H361f, Aquatic Chronic 4;H413, Flam. Liq. 3;H226	
acetic acid...%	DSD:	R10 C; R35	
	CLP:	Flam. Liq. 3;H226, Skin Corr. 1A;H314	

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.:

The full text for all R-phrases and H-statements is displayed in section 16.

SECTION 4: First aid measures

General: Get medical attention if symptoms occur. Contaminated clothing to be placed in closed container until disposal or decontamination.

4.1 Description of first aid measures:

Inhalation: Move into fresh air and keep at rest.

Eye contact: In the event of contact with the eyes, rinse thoroughly with clean water. Continue to rinse for at least 15 minutes.

Skin Contact: Remove contaminated clothing and shoes. Wash with soap and water.

Ingestion: Do not induce vomiting. Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: None known.

4.3 Indication of any immediate medical attention and special treatment needed:

Hazards: No specific recommendations.

Treatment: No specific recommendations.

SECTION 5: Firefighting measures

General Fire Hazards: No specific recommendations.

5.1 Extinguishing media:

Suitable extinguishing media: Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media: Do not use water as an extinguisher.

5.2 Special hazards arising from the substance or mixture: For further information, refer to Section 10: "Stability and Reactivity".

5.3 Advice for firefighters:

Special fire fighting procedures: Water spray should be used to cool containers.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Do not breathe vapor. See Section 8 of the SDS for Personal Protective Equipment. Ventilate the area.

- 6.2 Environmental Precautions:** Collect spillage. Do not discharge into drains, water courses or onto the ground.
- 6.3 Methods and material for containment and cleaning up:** Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent.(cf. : § 9) Flush area with plenty of water. Incinerate in suitable combustion chamber.
- Notification Procedures:** Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling:** Adequate ventilation should be provided so that exposure limits are not exceeded.
- 7.2 Conditions for safe storage, including any incompatibilities:** Avoid discharge into drains, water courses or onto the ground. Store in tightly closed original container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Avoid contact with oxidizing agents. Vulcanises at room temperature on contact with moisture in the air. For further information, refer to Section 10: "Stability and Reactivity". Suitable containers: Steel drums coated with epoxy-resin.
- 7.3 Specific end use(s):** No specific recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters:

Occupational Exposure Limits:

Chemical name	type	Exposure Limit Values	Source
octamethylcyclotetrasiloxane	VME	10 ppm 120 mg/m3	

Additional exposure limits under the conditions of use

Chemical name	type	Exposure Limit Values	Source
acetic acid...%	TWA	10 ppm 25 mg/m3	Ireland. Occupational Exposure Limits (2007)
	STEL	15 ppm 37 mg/m3	Ireland. Occupational Exposure Limits (2007)
	TWA	10 ppm 25 mg/m3	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU (12 2009)

8.2 Exposure controls:

Appropriate engineering controls: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Use engineering controls to reduce air contamination to permissible exposure level.

Individual protection measures, such as personal protective equipment:

General information: Provide sufficient ventilation during operations which cause vapor formation.

Eye/face protection:	Safety Glasses
Skin protection:	
Hand Protection:	Rubber gloves are recommended.
Other:	It is a good industrial hygiene practice to minimize skin contact. Wear suitable protective clothing.
Respiratory Protection:	If ventilation is insufficient, suitable respiratory protection must be provided.
Hygiene measures:	Provide eyewash station and safety shower.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	
Physical state:	Paste
Form:	Thixotropic
Color:	Black
Odor:	Vinegar.
Odor Threshold:	No data available.
pH:	Not applicable.
Melting Point:	No data available.
Boiling Point:	No data available.
Flash Point:	> 150 °C (Closed cup according to method Afnor T 60103.)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Relative density:	1,04 (20 °C) Approximate
Solubility(ies):	
Solubility in Water:	Practically Insoluble
Solubility (other):	Acetone.: Insoluble Ethanol.: Insoluble Petrol.: Partially soluble. White-spirit.: Partially soluble. Aromatic hydrocarbons.: Partially soluble. Chlorinated solvents.: Partially soluble.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	> 200 °C
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	According to the data on the components Not considered as oxidizing. (evaluation by structure-activity relationship)

SECTION 10: Stability and reactivity

10.1 Reactivity:	Vulcanises at room temperature on contact with moisture in the air.
10.2 Chemical Stability:	Stable at room temperature provided it is not on contact with air.
10.3 Possibility of hazardous reactions:	No data available.
10.4 Conditions to avoid:	No other information noted.
10.5 Incompatible Materials:	Strong oxidizing agents. Water.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Amorphous silica. During use or in contact with water, may generate hazardous substances.

SECTION 11: Toxicological information**Information on likely routes of exposure**

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

11.1 Information on toxicological effects:**Acute toxicity:**

Oral:	
Product:	Not classified for acute toxicity based on available data.

Dermal:	
Product:	Not classified for acute toxicity based on available data.

Inhalation:	
Product:	Composition/information on ingredients

Specified substance(s):	
octamethylcyclotetrasiloxane	LC 50 (Rat, 4 h): > 36 mg/l
acetic acid...%	LC 50 (Rat, 4 h): > 40 mg/l Vapor

Repeated dose toxicity:	
Product:	Composition/information on ingredients

Specified substance(s):	
Methylsilanetriyl triacetate	NOAEL (Rat(Female, Male), Oral): 50 mg/kg Results obtained on a similar product. NOAEL (Rat(Female, Male), Inhalation - vapor): 0,56 mg/l LOAEL (Rat(Female, Male), Inhalation - vapor): 2,2 mg/l Results obtained on a similar product.
octamethylcyclotetrasiloxane	NOAEL (Rat, Inhalation, 24 months): 1,820 mg/l NOAEL (Rabbit, Dermal, 3 weeks): 960 mg/kg
acetic acid...%	NOAEL (Rat, Feed (Oral)): 290 mg/kg

Skin Corrosion/Irritation:

Product: Test results
Not irritating Results obtained on a similar product.

Serious Eye Damage/Eye Irritation:

Product: Test results
Irritant. Results obtained on a similar product.

Respiratory or Skin Sensitization:

Product: Composition/information on ingredients

Specified substance(s):

Methylsilanetriyl triacetate OECD 406 (Guinea Pig) : Not a skin sensitizer.

octamethylcyclotetrasiloxane Pig : Not a skin sensitizer.

Germ Cell Mutagenicity:**In vitro:**

Product: Composition/information on ingredients

Specified substance(s):

Methylsilanetriyl triacetate Bacteria (OECD 471): No mutagenic effects.
(OECD 476)No mutagenic effects.Results obtained on a similar product.
Chromosomal aberration (OECD 473): No clastogenic effect.

octamethylcyclotetrasiloxane Bacteria : No mutagenic components identified.
Chromosomal aberration : No mutagenic components identified.

acetic acid...% Bacteria (OECD 471): No mutagenic effects.
Chromosomal aberration (OECD 473): No clastogenic effect.
(OECD 476)Inconclusive data

In vivo:

Product: Composition/information on ingredients

Specified substance(s):

octamethylcyclotetrasiloxane No mutagenic components identified.

acetic acid...% (According to a standardised method.)Results obtained on a similar product.No mutagenic effects.

Carcinogenicity:

Product: No data available.

Reproductive toxicity:

Product: No data available.

Reproductive toxicity (Fertility):

Product: Composition/information on ingredients

Specified substance(s):

Methylsilanetriyl triacetate

Rat Female, Male (Ingestion): NOAEL (parent): $\geq 1\ 000$ mg/kg NOAEL (F1):NOAEL (F2): Method: OECD 422

Developmental toxicity (Teratogenicity):

Product:

Composition/information on ingredients

Specified substance(s):

acetic acid...%

Rat (Ingestion): NOAEL (terato): 1 600 mg/kg NOAEL (mater): Method: According to a standardised method.

Specific Target Organ Toxicity - Single Exposure:

Product:

No data available.

Specific Target Organ Toxicity - Repeated Exposure:

Product:

Composition/information on ingredients

Specified substance(s):

Methylsilanetriyl triacetate

Not classified

Aspiration Hazard:

Product:

No data available.

Other Adverse Effects:

SECTION 12: Ecological information

12.1 Toxicity:

Acute toxicity:

Fish:

Product:

Composition/information on ingredients

Specified substance(s):

Methylsilanetriyl triacetate

LC 50 (96 h): > 100 mg/l Results obtained on a similar product.

octamethylcyclotetrasiloxane

LC 50 (Oncorhynchus mykiss, 96 h): $\geq 0,022$ mg/l

acetic acid...%

LC 50 (Oncorhynchus mykiss, 96 h): $> 1\ 000$ mg/l

Aquatic Invertebrates:

Product:

Composition/information on ingredients

Specified substance(s):

Methylsilanetriyl triacetate

LC 50 (48 h): > 100 mg/l Results obtained on a similar product.

octamethylcyclotetrasiloxane

EC 50 (Water flea (Daphnia magna), 48 h): $> 0,015$ mg/l

acetic acid...%

EC 50 (Water flea (Daphnia magna), 48 h): $> 1\ 000$ mg/l

Chronic Toxicity:

Fish:

Product:

Composition/information on ingredients

Specified substance(s):
octamethylcyclotetrasiloxane
NOEC (Oncorhynchus mykiss, 93 d): $\geq 0,0044$ mg/l

Aquatic Invertebrates:
Product: Composition/information on ingredients

Specified substance(s):
octamethylcyclotetrasiloxane
NOEC (Water flea (Daphnia magna), 21 d): 0,0079 mg/l

Toxicity to Aquatic Plants:
Product: Composition/information on ingredients

Specified substance(s):
Methylsilanetriyl triacetate
EC 50 (96 h): 660 mg/l Results obtained on a similar product.

octamethylcyclotetrasiloxane
EC 50 (Green algae (Selenastrum capricornutum), 96 h): $> 0,022$ mg/l

acetic acid...%
EC 50 (Alga, 72 h): $> 1\ 000$ mg/l
NOEC (Alga, 72 h): $1\ 000$ mg/l

12.2 Persistence and Degradability:

Biodegradation:
Product: Composition/information on ingredients

Specified substance(s):
Methylsilanetriyl triacetate
74 % (21 d, According to a standardised method.) Readily biodegradable Results obtained on a similar product.

octamethylcyclotetrasiloxane 3,7 % (29 d)

acetic acid...% 96 % (20 d) Readily biodegradable

BOD/COD Ratio:
Product: No data available.

12.3 Bioaccumulative Potential:

Product: No data available.

Specified substance(s):
octamethylcyclotetrasiloxane
Fathead Minnow, Bioconcentration Factor (BCF): 12 400

acetic acid...%
Bioconcentration Factor (BCF): 3,16 (estimated)

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: No data available.

12.6 Other Adverse Effects: No data available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods:**

General information: The user's attention is drawn to the possible existence of local regulations regarding disposal.

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate.

Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

SECTION 14: Transport information

This material is not subject to transport regulations.

Other information: No special precautions.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable..

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

National Regulations:

15.2 Chemical safety assessment: No data available.

SECTION 16: Other information

Revision Information: Not relevant.

Key abbreviations or acronyms used:

No data available.

Key literature references and sources for data: No data available.

Wording of the R-phrases and H-statements in section 2 and 3:

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H361f	Suspected of damaging fertility.
H413	May cause long lasting harmful effects to aquatic life.
R10	Flammable.
R14	Reacts violently with water.
R22	Harmful if swallowed.
R34	Causes burns.
R53	May cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.

Training information: No data available.

Inventory Status

Australia AICS:	On or in compliance with the inventory.
Canada DSL Inventory List:	On or in compliance with the inventory.
EINECS, ELINCS or NLP:	On or in compliance with the inventory.
Japan (ENCS) List:	On or in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory.

Issue Date: 17.11.2016

SDS No.:

Disclaimer:

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.