Printing date 09/01/2023

NOVAGARD

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Reviewed on 09/01/2023

1 Identification
· Product identifier
 Trade name: <u>RTV 400-195</u> Application of the substance / the mixture Industrial Silicone Adhesive and Sealant
 Details of the supplier of the safety data sheet Manufacturer/Supplier: Novagard Solutions Inc 5109 Hamilton Avenue CLEVELAND, OH 44114 USA
 Information department: R&D Department Emergency telephone number: CHEMTREC 1-800-424-9300 (USA) +1 703-741-5970 (International)
2 Hazard(s) identification
· Classification of the substance or mixture
GHS08 Health hazard
Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.
GHS09 Environment
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
Skin Irritation 2 H315 Causes skin irritation.
Eye Irritation 2A H319 Causes serious eye irritation.
 Label elements GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms
GHS07 GHS08 GHS09
• Signal word Warning
 Hazard-determining components of labeling: octamethylcyclotetrasiloxane
· Hazard statements Causes skin irritation.
Causes serious eye irritation. Suspected of damaging fertility or the unborn child.
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556-67-2 octamethylcyclotetrasiloxane

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	(Cr	ontd. of page 1)	
Toxic to aqua	tic life with long lasting effects.	ind. of page 1)	
Precautional			
	I instructions before use.		
Do not handle	e until all safety precautions have been read and understood.		
	ghly after handling. to the environment.		
	ve gloves/protective clothing/eye protection/face protection.		
	ish with plenty of water.		
	se cautiously with water for several minutes. Remove contact lenses, if prese	ent and easy	
to do. Continu			
	r concerned: Get medical advice/attention. ment (see on this label).		
	aminated clothing and wash it before reuse.		
	n occurs: Get medical advice/attention.		
	n persists: Get medical advice/attention.		
Collect spillag			
Store locked	up. Intents/container in accordance with local/regional/national/international regulat	tions	
· Classificatio		.10113.	
· NFPA rating			
	Health = 2 Fire = 1		
	Reactivity = 0		
\checkmark			
• HMIS-ratings	s (scale U - 4)		
HEALTH 2	Health = 2		
FIRE 1	Fire = 1		
REACTIVITY 0	Reactivity = 0		
· Other hazard	ls		
· Results of P	BT and vPvB assessment		
· PBT:			
556-67-2 oct	amethylcyclotetrasiloxane		
· vPvB:			
556-67-2 oct	amethylcyclotetrasiloxane		
I			
3 Compositi	on/information on ingredients		
	aracterization: Mixture		
 Description: Mixture of the substances listed below with nonhazardous additions. Dangerous components: 			
-	•	1 40/	
	butan-2-one O,O',O''-(methylsilylidyne)trioxime	1-4%	
	/inyltrisbutanoneoxime silane	0-2%	
	3-aminopropyltriethoxysilane	0-1%	
	3-(trimethoxysilyl)propylamine	0-1%	
34206-40-1	butan-2-one O,O',O'',O'''-silanetetrayltetraoxime	0–1%	

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0.04-0.4%

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4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:
 Do not allow product to reach sewage system or any water course.
 Inform respective authorities in case of seepage into water course or sewage system.
 Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13.
- Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling Open and handle receptacle with care.
- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.

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• Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

556-67-2 octamethylcyclotetrasiloxane

WEEL Long-term value: 10* ppm *OARS WEEL

• Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

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9 Physical and chemical proper	ties
 Information on basic physical and c General Information Appearance: 	hemical properties
Form:	Pasty
Color:	Translucent
· Odor:	Mild
Odor threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not determined.
 Decomposition temperature: 	Not determined.
· Ignition temperature:	Product is not selfigniting.
 Danger of explosion: 	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
[·] Density:	Not determined.
· Relative density	Not determined.
Vapor density	Not applicable.
· Evaporation rate	Not applicable.
• Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/water): Not determined.	
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

• Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.

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- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products:
- Combustion may create carbon monoxide, carbon dioxide, silicon dioxide and formaldehyde.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 ≥4,863 mg/kg

Dermal LD50 6,000–30,000 mg/kg

919-30-2 3-aminopropyltriethoxysilane

Oral LD50 1,780 mg/kg (rat)

Dermal LD50 4,000 mg/kg (rabbit)

Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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 Results of PBT and vPvB assessment 		
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· PBT:

556-67-2 octamethylcyclotetrasiloxane

· vPvB:

556-67-2 octamethylcyclotetrasiloxane

• Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

• **Recommendation:** Disposal must be made according to official regulations.

· UN-Number · DOT	not regulated
IMDG, IATA	UN3077
· UN proper shipping name	
· DOT · IMDG	not regulated ENVIRONMENTALLY HAZARDOUS SUBSTANC SOLID, N.O.S. (octamethylcyclotetrasiloxar dibutyltin dilaurate), MARINE POLLUTANT
ΙΑΤΑ	ENVIRONMENTALLY HAZARDOUS SUBSTANC SOLID, N.O.S. (octamethylcyclotetrasiloxar dibutyltin dilaurate)
· Transport hazard class(es)	
DOT	
· Class	not regulated
· Class · Label	9 Miscellaneous dangerous substances and articles 9
Packing group	
· DOT · IMDG, IATA	not regulated III

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	(Contd. of page 7
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
 Hazard identification number (Kemler code EMS Number: Stowage Category Stowage Code 	90 F-A,S-F A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
· Transport/Additional information:	
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (OCTAMETHYLCYCLOTETRASILOXANE DIBUTYLTIN DILAURATE), 9, III

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

- · Sara
- · Section 355 (extremely hazardous substances):
- None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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A4

- · Carcinogenic categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value)

77-58-7 dibutyltin dilaurate

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



· Signal word Warning

- Hazard-determining components of labeling: octamethylcyclotetrasiloxane
- Hazard statements Causes skin irritation.

Causes serious eye irritation. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.

Precautionary statements
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
If avoir irritation presents: Get medical advice/attention.
If avoir irritation presents: Get medical advice/attention.
If a skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Collect spillage.

Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Regulatory Compliance Department
- · Contact: novagard@novagard.net
- Date of preparation / last revision 09/01/2023

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· Abbreviations and acronyms:	(10 /
IMDG: International Maritime Code for Dangerous Goods	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
EINECS: European Inventory of Existing Commercial Chemical Substances	
ELINCS: European List of Notified Chemical Substances	
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
NFPA: National Fire Protection Association (USA)	
HMIS: Hazardous Materials Identification System (USA)	
LC50: Lethal concentration, 50 percent	
LD50: Lethal dose, 50 percent	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
NIOSH: National Institute for Occupational Safety	
OSHA: Occupational Safety & Health	
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	
Skin Irritation 2: Skin corrosion/irritation – Category 2	
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A	
Toxic to Reproduction 2: Reproductive toxicity – Category 2	
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2	
** Data compared to the previous version altered.	
	US