

Printing date 10/12/2018 Reviewed on 10/12/2018

## 1 Identification

- · Product identifier
- Trade name: RTV 800-275
- · Application of the substance / the mixture Silicone Conformal Coating
- · 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 800-424-9300 (24 hour)

## 2 Hazard(s) identification

· Classification of the substance or mixture



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Flam. Liq. 4 H227 Combustible liquid.

- · Label elements
- · GHS label elements

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

· Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Combustible liquid.

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Keep away from flames and hot surfaces. – No smoking.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

Specific treatment (see on this label).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

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

(Contd. on page 2)

(Contd. of page 1)



# **Safety Data Sheet** acc. to OSHA HCS

Printing date 10/12/2018 Reviewed on 10/12/2018

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· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



Fire = 1 Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. vPvB: Not applicable.

## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:			
2224-33-1	Vinyltrisbutanoneoxime silane	2–4%	
7473-98-5	2-hydroxy-2-methylpropiophenone	<2.0%	
919-30-2	3-aminopropyltriethoxysilane	<1.0%	
13822-56-5	3-(trimethoxysilyl)propylamine	<1.0%	

## 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)



Printing date 10/12/2018 Reviewed on 10/12/2018

Trade name: RTV 800-275

(Contd. of page 2)

· Advice for firefighters

· Protective equipment: No special measures required.

### 6 Accidental release measures

#### · Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 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.

· Protective Action Criteria for Chemicals

PAC-1:		
919-30-2	3-aminopropyltriethoxysilane	1.9 mg/m³
13822-56-5	3-(trimethoxysilyl)propylamine	30 mg/m³
77-58-7	dibutyltin dilaurate	1.1 mg/m³
· PAC-2:		
919-30-2	3-aminopropyltriethoxysilane	21 mg/m³
13822-56-5	3-(trimethoxysilyl)propylamine	330 mg/m³
77-58-7	dibutyltin dilaurate	8 mg/m³
· PAC-3:		
919-30-2	3-aminopropyltriethoxysilane	350 mg/m³
13822-56-5	3-(trimethoxysilyl)propylamine	2,000 mg/m³
77-58-7	dibutyltin dilaurate	48 mg/m³

## 7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

- · 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.
- · 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.

(Contd. on page 4)



Printing date 10/12/2018 Reviewed on 10/12/2018

Trade name: RTV 800-275

(Contd. of page 3)

· Control parameters

## Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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.

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

## 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid Color: Cloudy

Odor: Product specificOdor threshold: Not determined.

· **pH-value:** Not determined.

Change in condition

Melting point/Melting range: Undetermined.

(Contd. on page 5)



Printing date 10/12/2018 Reviewed on 10/12/2018

Trade name: RTV 800-275

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Boiling point/Boiling range:	Undetermined.	
· Flash point:	79.5 °C (175.1 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Not determined.	
· Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapor pressure:	Not determined.	
<ul> <li>Density at 20 °C (68 °F):</li> <li>Relative density</li> <li>Vapor density</li> <li>Evaporation rate</li> </ul>	1 g/cm³ (8.345 lbs/gal) Not determined. Not determined. Not determined.	
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/water): Not determined.		
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.	
Solvent content: VOC content:	0.00 %	
Solids content: Other information	>99.5 % 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.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products:

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 >10,892–19,303 mg/kg

(Contd. on page 6)



Reviewed on 10/12/2018 Printing date 10/12/2018

Trade name: RTV 800-275

(Contd. of page 5)

7473-98-5 2-hydroxy-2-methylpropiophenone		
Oral	LD50	1,694 mg/kg (rat)
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.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

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.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- vPvB: Not applicable.
- · 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.

(Contd. on page 7)



Printing date 10/12/2018 Reviewed on 10/12/2018

Trade name: RTV 800-275

(Contd. of page 6)

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

14 1	ransport	information			
· UN-Number					

· DOT, ADN, IMDG, IATA not regulated

· UN proper shipping name

· DOT, ADN, IMDG, IATA not regulated

· Transport hazard class(es)

· DOT, ADN, IMDG, IATA

· Class not regulated

· Packing group

· DOT, IMDG, IATA not regulated

• Environmental hazards: Not applicable.

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation": not regulated

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture · 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 ingredients are 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.

(Contd. on page 8)



Printing date 10/12/2018 Reviewed on 10/12/2018

Trade name: RTV 800-275

(Contd. of page 7)

### · Carcinogenic categories

#### · EPA (Environmental Protection Agency)

None of the ingredients is listed.

### TLV (Threshold Limit Value established by ACGIH)

77-58-7 dibutyltin dilaurate

Α4

### · 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



GHS07

#### · Signal word Warning

#### · Hazard statements

Combustible liquid.

Causes skin irritation.

Causes serious eye irritation.

#### Precautionary statements

Keep away from flames and hot surfaces. - No smoking.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

Specific treatment (see on this label).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

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 10/12/2018 / -

#### · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

(Contd. on page 9)



Printing date 10/12/2018 Reviewed on 10/12/2018

Trade name: RTV 800-275

HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) 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

Flam. Liq. 4: Flammable liquids – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

\* Data compared to the previous version altered.

(Contd. of page 8)