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Novagard SolutionsTM MATERIAL SAFETY DATA SHEET

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RTV 100 Series

INCLUDES: RTV 100-101, RTV 100-102

RTV 100-103, RTV 100-150

GENERIC DESCRIPTION: Silicone Elastomers

MANUFACTURED BY: Novagard Solutions[™]

5109 Hamilton Avenue

Cleveland, OH 44114 216-881-8111

www.Novagard.com

EMERGENCY PHONE NUMBER: CHEMTREC 800-424-9300 (24 hour)

REVISED: 07-31-12 **PREPARED BY**: Brian Chambers

SECTION 2 - HAZARDOUS COMPONENTS

COMPONENT	CAS No.	WT %	OSHA-PEL		ACGIH-TLV	
			TWA	STEL	TWA	STEL
A. Hazardous Methyltriacetoxysilane	4253-34-3	1-5	10 ppm	NE	10 ppm	NE
B. Non-hazardous Trade secret component		1-5	10 mg/m^3	NE	15 mg/m ³	NE
Trade secret component		5-10	NF	NE	NF	NE
Dimethylpolysiloxane Trade secret component	63148-62-9	1-5 0.0940	$NA \\ 10 \text{ mg/m}^3$	NE NE	$\frac{NA}{15 \text{ mg/m}^3}$	NE NE

SECTION 3 - EFFECTS OF OVEREXPOSURE

Potential Health Effects

Eye: Uncured product contact irritates eyes

Skin: Uncured product contact will irritate lips, gums and tongue

Uncured product contact may irritate the skin

Inhalation: Causes irritation of the mouth nose and throat. Applies only in uncured state.

Oral: May be harmful if swallowed

Special Hazards

Carcinogens: This product does not contain any ingredients listed by IARC, NTP or OSHA

as chemical carcinogens.

Teratogens:Mutagens:
None known
Reproductive Toxins:
None known

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SECTION 4 - FIRST AID MEASURES

Eyes: Immediately flush with water for at least 15 minutes. Seek medical attention if irritation

persists.

Skin: Wipe off completely with a dry cloth or paper towel and flush with detergent and water.

Get medical ttention if a irritation develops.

Inhalation: Remove to fresh air.

Oral: Rinse mouth with water several times.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: Not Applicable - solid

Flammability Limits in Air: Upper - Not Determined Lower - Not Determined

Extinguishing Media: Water, CO₂, Dry Chemical, Foam.

Special Fire Fighting Procedures: None known

This product contains Methylpolysiloxanes which can generate formaldehyde at approximately 300° F and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Disposal of collected product, residues and cleanup materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Scrape up and contain for salvage or disposal. Wash all walking surfaces with detergent and water to reduce slipping hazard. Observe all personal and protection equipment recommendations described in Section 5 and 8. Local, state and federal reporting requirements may apply to spills or releases of this matter into the environment. See applicable regulatory compliance information in Section 15.

SECTION 7 - HANDLING AND STORAGE

Precautions: Keep container closed when not in use. Avoid contact with skin and eyes.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the fingertips, nails and cuticles. Residual sealant may remain on the fingers for several days and transfer to lenses and cause severe eye irritation.

Product releases acetic acid during application and curing.

Use mechanical ventilation to stay below TLV of 10 ppm acetic acid.

Uncured product contact irritates eyes. Uncured product contact may irritate skin

Use in well ventilated area to prevent irritation by vapors.

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SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Local exhaust: Recommended General ventilation: Recommended Eyewash stations: Recommended

Personal Protective Equipment for Routine Handling

Eyes: Safety glasses

Skin: Wash after any contact. Cloth gloves

Inhalation: Use respiratory protection unless adequate local exhaust ventilation provided or air

sampling data show that exposures are within recommend guidelines. Suitable

respirators:Organic Vapor Type

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical form Odor: Vinegar smell Paste Specific Gravity @25?C: 1.02 Boiling Point (@ 760 mm Hg) Not applicable Freezing/melting point Not applicable Not applicable Vapor pressure: **Evaporation rate:** Not applicable **Volatile content:** Not applicable

Odor threshold 1.0 ppm (acetic) Percent Volatile by volume:

VOC (EPA method 24): 31 gm/l **Evaporation Rate**

Solubility in water: <1% (butyl acetate =1): <1.0

Solubility in organic solvent: Toluene

SECTION 10 - STABILITY AND REACTIVITY

< 8.0

Chemical stability: Stable

Hazardous polymerization:Will not occurConditions to avoid:None knownMaterials to avoid:None knownConditions to avoid:None known

Hazardous thermal decomposition

and combustion by-products: Carbon monoxide, carbon dioxide, silicon dioxide, and

formaldehyde

SECTION 11 - TOXICOLOGICAL INFORMATION

Ames Test:

 $\underline{Methyltriacetoxysilane}$

Acute oral LD 50 (mg/kg)

Acute dermal LD50 (mg/kg)

Acute inhalation

Other

2,060 (rat)

none found

none found

none

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SECTION 11 - TOXICOLOGICAL INFORMATION (continued)

Ames Test:

Trade Secret Component

Acute oral LD 50 (mg/kg) >10,000 (rat, estimate)

Acute dermal LD50 (mg/kg)

Acute inhalation

NA

Other

NA

none

Ames Test:

Dimethyl polysiloxane

Acute oral LD 50 (mg/kg) >40,000 (rat)

Acute dermal LD50 (mg/kg) non-irritating (rabbit)
Acute inhalation >535 mg/L (rat)

Other none

Ames Test:

Trade Secret Component

Acute oral LD 50 (mg/kg) >40,000 (rat)

Acute dermal LD50 (mg/kg) non-irritating (rabbit)
Acute inhalation >535 mg/L (rat)

Other none

Ames Test:

<u>Polydimethylsiloxane</u>

Acute oral LD 50 (mg/kg) 20,000 (rat)

Acute dermal LD50 (mg/kg) none
Acute inhalation none
Other none

Ames Test:

Trade Secret component

Acute oral LD 50 (mg/kg)

Acute dermal LD50 (mg/kg)

Acute inhalation

NA

Other

NA

none

SECTION 12 - ECOLOGICAL INFORMATION

OPTIONAL SECTION - complete information not yet available

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SECTION 13 - DISPOSAL CONSIDERATIONS

OPTIONAL SECTION - complete information not yet available

SECTION 14 - TRANSPORTATION INFORMATION

DOT shipping name: None DOT hazard class : None

DOT labels: None UN/NA number: None Placards: None IATA: None

IMO IMDG -code: None

SECTION 15 - REGULATORY INFORMATION

TSCA Status:

All chemical substances found in this product comply with the Toxic Substances Control act Inventory reporting requirements.

EPA SARA Title III Chemical Listings:

40 CFR 355 Section 302

Extremely Hazardous Substance List: None found

Section 312, 311 Hazard Class: Acute Health Hazard

40 CFR 372.65 Section 313

Toxic Chemical List: None found

WHMIS Hazard class:

D2B Toxic materials

Hazard Rating System:

HMIS: Flammability 0, Reactivity 0, Health 2 NFAPA: Flammability 0, Reactivity 0, Health 2

California Proposition 65: None

The information presented in this Material Safety Data Sheet relates only to the specific product designated herein, and no warranty, or guarantee, either expressed or implied is made regarding the performance and conditions of this product. This information is based upon information that Novagard believes to be true and accurate; however, it is the responsibility of each user to review this information within the specific context of their intended application.