

Printing date 01/29/2020 Reviewed on 01/29/2020

1 Identification

- · Product identifier
- Trade name: Novagard 900-300
- · Application of the substance / the mixture Hybrid 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



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 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

- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

Precautionary statements

Wash thoroughly after handling.

Wear protective gloves / 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.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 0

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

3 Composition/information on ingredients

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

· Dangerous components:			
471-34-1	calcium carbonate	24–26%	
2768-02-7	trimethoxyvinylsilane	0.5–1.5%	
919-30-2	3-aminopropyltriethoxysilane	0.5–1.49%	
13822-56-5	3-(trimethoxysilyl)propylamine	0.5–1.49%	

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.

(Contd. on page 3)

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

(Contd. of page 2)

- · 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 to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · 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:			
471-34-1	calcium carbonate	45 mg/m ³	
7631-86-9	silicon dioxide, chemically prepared	18 mg/m ³	
2768-02-7	trimethoxyvinylsilane	9.5 ppm	
919-30-2	3-aminopropyltriethoxysilane	1.9 mg/m ³	
13822-56-5	3-(trimethoxysilyl)propylamine	30 mg/m ³	
77-58-7	dibutyltin dilaurate	1.1 mg/m ³	
58-36-6	Arsenazo III	5 mg/m ³	
· PAC-2:		<u> </u>	
471-34-1	calcium carbonate	210 mg/m ³	
7631-86-9	silicon dioxide, chemically prepared	740 mg/m ³	
2768-02-7	trimethoxyvinylsilane	100 ppm	
919-30-2	3-aminopropyltriethoxysilane	21 mg/m ³	
13822-56-5	3-(trimethoxysilyl)propylamine	330 mg/m ³	
77-58-7	dibutyltin dilaurate	8 mg/m ³	
58-36-6	Arsenazo III	14 mg/m ³	
· PAC-3:			
471-34-1	calcium carbonate	1,300 mg/m ³	
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m ³	
2768-02-7	trimethoxyvinylsilane	120 ppm	
919-30-2	3-aminopropyltriethoxysilane	350 mg/m ³	
13822-56-5	3-(trimethoxysilyl)propylamine	2,000 mg/m ³	
77-58-7	dibutyltin dilaurate	48 mg/m ³	
58-36-6	Arsenazo III	84 mg/m ³	
	I .		

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.

(Contd. on page 4)

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

(Contd. of page 3)

- · 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.
- · 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.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

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

471-34-1 calcium carbonate

PEL Long-term value: 15* 5** mg/m³

*total dust **respirable fraction

REL Long-term value: 10* 5** mg/m³

*total dust **respirable fraction

TLV TLV withdrawn

- · 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.

(Contd. on page 5)

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

· Eye protection:

(Contd. of page 4)



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Pasty

Color: Different according to coloring

· 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.

· **Auto igniting:** 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 at 20 °C (68 °F):** 1.45 g/cm³ (12.10025 lbs/gal)

Relative density
 Vapor density
 Evaporation rate
 Not determined.
 Not applicable.

· Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

• Other information No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

(Contd. on page 6)

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

(Contd. of page 5)

- · 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: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:

ATE (Acute Toxicity Estimate)			
Oral	LD50	119,463-356,000 mg/kg (rat)	
Dermal	LD50	268,456-800,000 mg/kg (rabbit)	
Inhalative	LC50/4 h	100–300 mg/l	

919-30-2 3-aminopropyltriethovysilan			
	Oral	LD50	6,450 mg/kg (rat)

471-34-1 calcium carbonate

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)

7631-86-9 silicon dioxide, chemically prepared

3

· 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.

(Contd. on page 7)

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

(Contd. of page 6)

- · 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.

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

14 Transport 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 MARPOL73/78 and the IBC Code 	II of 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):

58-36-6 Arsenazo III

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

(Contd. on page 8)

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

	(Cont	d. of page 7)
· TSCA (Toxic	Substances Control Act):	
1317-65-3	calcium carbonate	ACTIVE
471-34-1	calcium carbonate	ACTIVE
7631-86-9	silicon dioxide, chemically prepared	ACTIVE
2768-02-7	trimethoxyvinylsilane	ACTIVE
919-30-2	3-aminopropyltriethoxysilane	ACTIVE
13822-56-5	3-(trimethoxysilyl)propylamine	ACTIVE
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	ACTIVE
125643-61-0	A mixture of isomers of: C7-9-alkyl-3-(3,5-di-trans-butyl-4-hydroxyphenyl) propionate	ACTIVE
77-58-7	dibutyltin dilaurate	ACTIVE
82919-37-7	methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate	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.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

77-58-7 dibutyltin dilaurate

A4

· 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

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

(Contd. on page 9)

Printing date 01/29/2020 Reviewed on 01/29/2020

Trade name: Novagard 900-300

Specific treatment (see on this label).

(Contd. of page 8)

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.

· 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 01/29/2020 / -
- · 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) 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 Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

· * Data compared to the previous version altered.

- US