

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

1 Identification

- **Product identifier**
- **Trade name: Novagard 900-91x**
- **Application of the substance / the mixture** General Purpose 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

Repr. 1B H360 May damage fertility or the unborn child.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2A H319 Causes serious eye irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Acute 3 H402 Harmful to aquatic life.
 Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **Label elements**

- **GHS label elements**

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

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

dibutyltin dilaurate
 Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

- **Hazard statements**

Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 1)

May damage fertility or the unborn child.

Harmful to aquatic life.

Harmful 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.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

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 or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store locked up.

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

• **Classification system:**

• **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

• **HMIS-ratings (scale 0 - 4)**



Health = 2

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: Mixture**

• **Description:** Mixture of the substances listed below with nonhazardous additions.

• **Dangerous components:**

471-34-1	calcium carbonate	8–12%
2768-02-7	trimethoxyvinylsilane	0.5–1.5%
919-30-2	3-aminopropyltriethoxysilane	1–1.5%
13822-56-5	3-(trimethoxysilyl)propylamine	1–1.5%
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	0.3–0.6%

(Contd. on page 3)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

77-58-7 dibutyltin dilaurate

(Contd. of page 2)

0.05–0.12%

4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
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.
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:**

471-34-1	calcium carbonate	45 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

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 3)

- **PAC-2:**

471-34-1	calcium carbonate	210 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
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

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
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.
- **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/m ³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	TLV withdrawn

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 4)

77-58-7 dibutyltin dilaurate

PEL	Long-term value: 0.1 mg/m ³ as Sn
REL	Long-term value: 0.1 mg/m ³ as Sn, Skin
TLV	Short-term value: 0.2 mg/m ³ Long-term value: 0.1 mg/m ³ as Sn; Skin

- **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:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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: Pasty

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 5)

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/cm ³ (12.10025 lbs/gal)
· 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.
· 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.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Extreme temperatures may result in the formation of formaldehyde

US

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 6)

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

- LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral	LD50	118,667–178,000 mg/kg (rat)
Dermal	LD50	266,667–400,000 mg/kg (rabbit)
Inhalative	LC50/4 h	100–300 mg/l

471-34-1 calcium carbonate

Oral	LD50	6,450 mg/kg (rat)
------	------	-------------------

919-30-2 3-aminopropyltriethoxysilane

Oral	LD50	1,780 mg/kg (rat)
Dermal	LD50	4,000 mg/kg (rabbit)

77-58-7 dibutyltin dilaurate

Oral	LD50	175 mg/kg (rat)
------	------	-----------------

- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- Sensitization: Sensitization possible through skin contact.
- 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.
- Ecotoxicological effects:
- Remark: Harmful to fish
- 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.

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 7)

- Harmful to aquatic organisms
- **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 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):**

58-36-6 Arsenazo III

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

1317-65-3 calcium carbonate

ACTIVE

6422-86-2 bis(2-ethylhexyl) terephthalate

ACTIVE

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 8)

471-34-1	calcium carbonate	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
82919-37-7	methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate	ACTIVE
77-58-7	dibutyltin dilaurate	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 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

dibutyltin dilaurate

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

- **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May damage fertility or the unborn child.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

(Contd. on page 10)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Novagard 900-91x

(Contd. of page 9)

- **Precautionary statements**

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wash thoroughly after handling.
- Contaminated work clothing must not be allowed out of the workplace.
- 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 or rash occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Wash contaminated clothing before reuse.
- 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** 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
 - Skin Sens. 1: Skin sensitisation – Category 1
 - Repr. 1B: Reproductive toxicity – Category 1B
 - Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3
 - Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
- * **Data compared to the previous version altered.**

US