# SAFETY DATA SHEET

Date of issue/Date of revision : 3 July 2018 Version : 13.05



# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : NOVAGUARD 840/890 HARDENER CREAM

Product code : 00237774

Other means of : Not available.

identification

1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.

#### 1.3 Details of the supplier of the safety data sheet

PPG Coatings SPRL/BVBA Tweemontstraat 104 B-2100 Deurne Belgium

Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: PMC.Safety@PPG.com

#### 1.4 Emergency telephone number

**Supplier** 

+31 20 4075210

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

English (US) Europe 1/15

**NOVAGUARD 840/890 HARDENER CREAM** 

## **SECTION 2: Hazards identification**

Hazard pictograms







Signal word : Danger

**Hazard statements** : Toxic in contact with skin or if inhaled.

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention**: Wear protective gloves. Wear protective clothing. Wear eye or face protection.

Avoid breathing vapor.

**Response**: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF

SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Storage : Store locked up.

Disposal : Not applicable.

P280, P261, P304 + P340, P301 + P310, P303 + P361 + P353, P305 + P351 + P338,

P405

**Hazardous ingredients** : 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)

N-(3-(trimethoxysilyl)propyl)ethylenediamine 2,4,6-tris(dimethylaminomethyl)phenol

Supplemental label

elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

**Special packaging requirements** 

**Containers to be fitted** 

with child-resistant fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification

: None known.

# SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

English (US) Europe 2/15

**NOVAGUARD 840/890 HARDENER CREAM** 

# **SECTION 3: Composition/information on ingredients**

			Classification	
Product/ingredient name	Identifiers	% by weight	Regulation (EC) No. 1272/2008 [CLP]	Туре
2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine)	EC: 229-962-1 CAS: 6864-37-5 Index: 612-110-00-1	≥75 - ≤90	Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Chronic 2, H411	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤14	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
N-(3-(trimethoxysilyl)propyl) ethylenediamine	EC: 217-164-6 CAS: 1760-24-3	≥1.0 - ≤5.0	Acute Tox. 4, H332 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
2,4,6-tris(dimethylaminomethyl) phenol	EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥1.0 - ≤3.6	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317	[1]
proprietary 2-methyl-4, 4'methylenebis(cyclohexylamine)	CAS: SUB132924	≤0.27	Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 2, H373 (adrenal, blood, heart, kidneys, liver) Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

#### **Type**

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

English (US) Europe 3/15

**NOVAGUARD 840/890 HARDENER CREAM** 

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with running water

for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

**Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

**Ingestion**: If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly

with water before removing it, or wear gloves.

#### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation**: Toxic if inhaled.

**Skin contact**: Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.

**Ingestion**: Harmful if swallowed.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

pain or irritation redness

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

#### 5.2 Special hazards arising from the substance or mixture

English (US) Europe 4/15

**NOVAGUARD 840/890 HARDENER CREAM** 

# SECTION 5: Firefighting measures

Hazards from the substance or mixture In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion** products

: Decomposition products may include the following materials: carbon oxides

nitrogen oxides metal oxide/oxides Formaldehyde.

#### 5.3 Advice for firefighters

fighters

Special precautions for fire- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

**Special protective** equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

#### SECTION 6: Accidental release measures

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### 6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

#### 6.3 Methods and materials for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

English (US) 5/15 **Europe** 

**NOVAGUARD 840/890 HARDENER CREAM** 

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

#### **Protective measures**

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

# 7.2 Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### 7.3 Specific end use(s)

See Section 1.2 for Identified uses.

# **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
benzyl alcohol	IPEL (PPG). TWA: 10 ppm STEL: 50 ppm

# Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482

English (US)	Europe	6/15
--------------	--------	------

**NOVAGUARD 840/890 HARDENER CREAM** 

# **SECTION 8: Exposure controls/personal protection**

(Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs**

DNELs - Not available.

#### **PNECs**

PNECs - Not available.

#### 8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### **Individual protection measures**

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

# Eye/face protection Skin protection

**Hand protection** 

: Chemical splash goggles and face shield. Use eye protection according to EN 166.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended.

#### **Gloves**

: nitrile neoprene

**Body protection** 

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapor (Type A) and particulate filter P3

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

English (US) Europe 7/15

**NOVAGUARD 840/890 HARDENER CREAM** 

# SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

**Appearance** 

**Physical state** : Liquid. Color : Various

Odor : Amine-like. [Strong] Not available. **Odor threshold** : insoluble in water. pН

Melting point/freezing point : May start to solidify at the following temperature: -7.1°C (19.2°F) This is based on

data for the following ingredient: 2,2'-dimethyl-4,4'-methylenebis

(cyclohexylamine). Weighted average: -8.54°C (16.6°F)

Initial boiling point and boiling

range

: >37.78°C

: Closed cup: 105°C Flash point

**Evaporation rate** : 0.007 (benzyl alcohol) compared with butyl acetate

Material supports combustion. : Yes. Flammability (solid, gas) : liquid

Upper/lower flammability or

explosive limits

: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)

: Highest known value: 0.04 kPa (0.3 mm Hg) (at 20°C) (N-(3-(trimethoxysilyl) Vapor pressure

propyl)ethylenediamine). Weighted average: 0.002 kPa (0.02 mm Hg) (at 20°C)

: Stable under recommended storage and handling conditions (see Section 7).

Vapor density : Highest known value: 3.7 (Air = 1) (benzyl alcohol).

**Relative density** 

Solubility(ies) : Insoluble in the following materials: cold water.

Partition coefficient: n-octanol/ : Not applicable.

water

: 426°C **Auto-ignition temperature** 

**Decomposition temperature** 

**Viscosity** : Kinematic (40°C): <0.14 cm<sup>2</sup>/s

**Explosive properties** The product itself is not explosive, but the formation of an explosible mixture of

vapor or dust with air is possible.

**Oxidizing properties** : Product does not present an oxidizing hazard.

#### 9.2 Other information

No additional information.

# SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition

products.

Refer to protective measures listed in sections 7 and 8.

8/15 English (US) **Europe** 

**NOVAGUARD 840/890 HARDENER CREAM** 

# **SECTION 10: Stability and reactivity**

10.5 Incompatible materials : Keep

: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides Formaldehyde. metal oxide/oxides

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine)	LC50 Inhalation Dusts and mists	Rat	420 mg/m³	4 hours
	LD50 Dermal	Rabbit	>0.2 g/kg	-
	LD50 Oral	Rat	>0.32 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Oral	Rat	2413 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	LD50 Dermal	Rabbit	1.28 g/kg	-
	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-

**Conclusion/Summary** 

: There are no data available on the mixture itself.

#### **Acute toxicity estimates**

Route	ATE value
<b>Ø</b> ral	583.3 mg/kg
Dermal	373.2 mg/kg
Inhalation (vapors)	317.5 mg/l
Inhalation (dusts and mists)	0.579 mg/l

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
2,4,6-tris(dimethylaminomethyl)phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days

#### **Conclusion/Summary**

Skin
 There are no data available on the mixture itself.
 Eyes
 There are no data available on the mixture itself.
 Respiratory
 There are no data available on the mixture itself.

#### **Sensitization**

Product/ingredient name	Route of exposure	Species	Result
2,4,6-tris(dimethylaminomethyl)phenol	skin	Guinea pig	Sensitizing

#### **Conclusion/Summary**

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

**Mutagenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

**Carcinogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

English (US) Europe 9/15

Code : 00237774 Date of issue/Date of revision : 3 July 2018

**NOVAGUARD 840/890 HARDENER CREAM** 

# **SECTION 11: Toxicological information**

Reproductive toxicity

**Conclusion/Summary**: There are no data available on the mixture itself.

**Teratogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
proprietary 2-methyl-4,4'methylenebis(cyclohexylamine)	Category 2	Not determined	adrenal, blood, heart, kidneys and liver

#### **Aspiration hazard**

Not available.

Information on the likely

routes of exposure

: Not available.

#### Potential acute health effects

Inhalation: Toxic if inhaled.Ingestion: Harmful if swallowed.

**Skin contact**: Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.

**Eye contact** : Causes serious eye damage.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation** : No specific data.

**Ingestion** : Adverse symptoms may include the following:

stomach pains

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

#### Potential chronic health effects

Not available.

**Conclusion/Summary**: Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

English (US) Europe 10/15

Code : 00237774 Date of issue/Date of revision : 3 July 2018

**NOVAGUARD 840/890 HARDENER CREAM** 

## SECTION 11: Toxicological information

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, 2,4,6-tris(dimethylaminomethyl)phenol. May produce an allergic reaction.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Conclusion/Summary**: There are no data available on the mixture itself.

### 12.2 Persistence and degradability

**Conclusion/Summary**: There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>p</b> enzyl alcohol	-	-	Readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	2.5	-	low
benzyl alcohol	1.1	-	low

#### 12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

Mobility : Not available.

#### 12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

#### **12.6 Other adverse effects** : No known significant effects or critical hazards.

English (US)	Europe	11/15
--------------	--------	-------

**NOVAGUARD 840/890 HARDENER CREAM** 

# **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### **Product**

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

### Hazardous waste : Yes. European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

#### **Packaging**

**Methods of disposal** 

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging		European waste catalogue (EWC)
Container	15 01 06	mixed packaging

#### **Special precautions**

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# 14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN2922	UN2922	UN2922	UN2922
14.2 UN proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S. (methanol)	CORROSIVE LIQUID, TOXIC, N.O.S. (methanol)	CORROSIVE LIQUID, TOXIC, N.O.S. (methanol)	CORROSIVE LIQUID, TOXIC, N.O.S. (methanol)
14.3 Transport hazard class(es)	8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(2,2'-dimethyl-4,4'- methylenebis (cyclohexylamine))	Not applicable.

#### **Additional information**

ADR/RID

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

English (US) Europe 12/15

Code : 00237774 Date of issue/Date of revision : 3 July 2018

**NOVAGUARD 840/890 HARDENER CREAM** 

# 14. Transport information

ADN : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L

or ≤5 kg.

**IMDG**: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation

regulations.

14.6 Special precautions for

user

: **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

: Not applicable.

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

**Annex XIV** 

None of the components are listed.

**Substances of very high concern** 

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture,

placing on the market and

use of certain dangerous

substances, mixtures and

articles

**Other EU regulations** 

Ozone depleting substances (1005/2009/EU)

Not listed.

#### **Seveso Directive**

This product is controlled under the Seveso Directive.

#### **Danger criteria**

Category

H2

E2

15.2 Chemical Safety Assessment

: No Chemical Safety Assessment has been carried out.

#### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** 

English (US) Europe 13/15

**NOVAGUARD 840/890 HARDENER CREAM** 

#### **SECTION 16: Other information**

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

#### Full text of abbreviated H statements

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### Full text of classifications [CLP/GHS]

Acute Tox. 2, H330	ACUTE TOXICITY (inhalation) - Category 2
Acute Tox. 3, H311	ACUTE TOXICITY (dermal) - Category 3
Acute Tox. 3, H331	ACUTE TOXICITY (inhalation) - Category 3
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Chronic 2, H411	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Corr. 1A, H314	SKIN CORROSION/IRRITATION - Category 1A
Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C, H314	SKIN CORROSION/IRRITATION - Category 1C
Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1
Skin Sens. 1B, H317	SKIN SENSITIZATION - Category 1B
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)
	- Category 2

**History** 

Date of issue/ Date of : 3 July 2018

revision

Date of previous issue : 20 June 2018

Prepared by : EHS Version : 13.05

**Disclaimer** 

English (US) Europe 14/15

Code : 00237774 Date of issue/Date of revision : 3 July 2018

**NOVAGUARD 840/890 HARDENER CREAM** 

### **SECTION 16: Other information**

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

English (US) Europe 15/15