# SAFETY DATA SHEET

Date of issue/Date of revision : 7 November 2021 Version : 12



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

1.1 Product identifier

Product name : NOVAGUARD 890 HARDENER GREEN

Product code : 00269263

Product type : Liquid.

Other means of identification

Not available.

#### 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.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

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

Sigma Paint Saudi Arabia Ltd.

PO Box 7509 Dammam 31472 Saudi Arabia

Tel: 00966 138 47 31 00 Fax: 00966 138 47 17 34

e-mail address of person responsible for this SDS

: ndpic@sfda.gov.sa

1.4 Emergency telephone

number

: 00966 138473100 extn 1001

# **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 (GB) United Arab Emirates 1/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

### SECTION 2: Hazards identification

**Hazard pictograms** 





Signal word : Danger

Harmful if swallowed. **Hazard statements** 

> Toxic in contact with skin or if inhaled. 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, protective clothing and eye or face protection. Avoid release to

the environment.

: Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF Response

SWALLOWED: Immediately call a POISON CENTER or doctor. IF ON SKIN (or hair):

Take off immediately all contaminated clothing. Rinse skin with water.

: Not applicable. **Storage** : Not applicable. **Disposal** 

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

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

Supplemental label : Not applicable.

**Annex XVII - Restrictions** on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

**Special packaging requirements** 

Containers to be fitted with child-resistant

fastenings

elements

articles

: Not applicable.

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

**Product meets the criteria** 

for PBT or vPvB

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do

: None known.

not result in classification

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

Mixture 3.2 Mixtures

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

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

Product/ingredient name	Identifiers	% by weight	Classification 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 - ≤15	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	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≥1.0 - ≤3.5	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317	[1]

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

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, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### <u>Type</u>

Ingestion

- [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.

#### 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.

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

**Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly w or use recognised skin cleanser. Do NOT use solvents or thinners.

: If swallowed, seek medical advice immediately and show the container or label. Keep

give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

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

before removing it, or wear gloves.

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

ı	English (GB)	United Arab Emirates	3/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

#### SECTION 4: First aid measures

#### 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.

: Adverse symptoms may include the following: Skin contact

pain or irritation

redness

blistering may occur

Adverse symptoms may include the following: Ingestion

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

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

Special precautions for

fire-fighters

: 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.

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

#### 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 spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised 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 spilt 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 material 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 the 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 spilt 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.

# **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** 

• Fut on appropriate personal protective equipment (see Section 8). 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 vapour or mist. Do not ingest. Avoid release to the environment. 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.

English (GB) United Arab Emirates

5/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

# SECTION 7: Handling and storage

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 unlabelled 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.

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

# **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
penzyl alcohol	IPEL (-). TWA: 5 ppm STEL: 10 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 (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.

#### 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 Chemical splash goggles and face shield.

Hand protection

English (GB) United Arab Emirates 6/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

# SECTION 8: Exposure controls/personal protection

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. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Gloves** : nitrile neoprene

: Personal protective equipment for the body should be selected based on the task being **Body protection** 

performed and the risks involved and should be approved by a specialist before

handling this product.

Appropriate footwear and any additional skin protection measures should be selected Other skin protection 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.

**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.

# **SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

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

**Appearance** 

**Physical state** : Liquid. Colour : Green.

Odour : Amine-like. [Strong]

: Not available. **Odour threshold** 

: insoluble in water.

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: -8.53°C (16.6°F)

Initial boiling point and

boiling range

: >37.78°C

Flash point : Open cup: 100°C

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

Flammability (solid, gas) : liquid

Upper/lower flammability or

explosive limits

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

Vapour pressure

English (GB) **United Arab Emirates** 7/13

: 00269263 Date of issue/Date of revision : 7 November 2021 Code

**NOVAGUARD 890 HARDENER GREEN** 

# SECTION 9: Physical and chemical properties

La constitue de co	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
y-(3-(trimethoxysilyl) propyl)ethylenediamine	0.3000246	0.04				

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

: 0.97 Relative density

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

Partition coefficient: n-octanol/: Not applicable.

water

**Viscosity** 

**Auto-ignition temperature** 

: 275°C (527°F)

**Decomposition temperature** 

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

: Kinematic (40°C): <14 mm<sup>2</sup>/s

**Explosive properties** : Product does not present an explosion hazard. **Oxidising 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.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising 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	LC50 Inhalation Dusts and	Rat	420 mg/m³	4 hours
(cyclohexylamine)	mists			
	LD50 Dermal	Rabbit	>0.2 g/kg	-
	LD50 Oral	Rat	>0.32 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m³	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	-

English (GB) United Arab Emirates 8/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

# **SECTION 11: Toxicological information**

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	583.19 mg/kg
Dermal	374.21 mg/kg
Inhalation (vapours)	317.46 mg/l
Inhalation (dusts and mists)	0.6 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.

#### **Sensitisation**

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

#### **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.

**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)

Not available.

#### **Aspiration hazard**

Not available.

Information on likely

: Not available.

routes of exposure

#### 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.

English (GB) United Arab Emirates 9/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

# SECTION 11: Toxicological information

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 as well as 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.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C/140F.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2,4,6-tris(dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours

**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
penzyl alcohol	-	-	Readily

10/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

# **SECTION 12: Ecological information**

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	1.8	-	low
benzyl alcohol	0.87	-	low
2,4,6-tris(dimethylaminomethyl)phenol	0.219	-	low

#### **12.4 Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

# **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 minimised 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 minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

# **SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
14.1 UN number	UN2922	UN2922	UN2922
14.2 UN proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S. (2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl)phenol)	CORROSIVE LIQUID, TOXIC, N.O.S.	CORROSIVE LIQUID, TOXIC, N.O.S.
14.3 Transport hazard class(es)	8 (6.1)	8 (6.1)	8 (6.1)
14.4 Packing group	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	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

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

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

regulations.

user

14.6 Special precautions for : 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 IMO instruments

: 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 authorisation

**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 national and international regulations.

Ozone depleting substances (1005/2009/EU)

English (GB) **United Arab Emirates** 12/13

Code : 00269263 Date of issue/Date of revision : 7 November 2021

**NOVAGUARD 890 HARDENER GREEN** 

# **SECTION 15: Regulatory information**

Not listed.

15.2 Chemical safety

: No Chemical Safety Assessment has been carried out.

assessment

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

Indicates information that has changed from previously issued version.

**Abbreviations and** 

acronyms

: 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
PRN = REACH Registration Number

RRN = REACH Registration Number

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.

H331 Toxic if inhaled. H332 Harmful if inhaled.

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. 3 ACUTE TOXICITY - Category 3
Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Skin Corr. 1A SKIN CORROSION/IRRITATION - Category 1A Skin Corr. 1C SKIN CORROSION/IRRITATION - Category 1C

Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1B SKIN SENSITISATION - Category 1B

**History** 

Date of issue/ Date of

revision

: 7 November 2021

Date of previous issue : 16 June 2019

Prepared by : EHS Version : 12

#### **Disclaimer**

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 (GB) United Arab Emirates 13/13