Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

# **SAFETY DATA SHEET**

Date of issue/Date of revision

: 7 November 2021 Version : 3



# 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 identificat	ion
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 o	f the safety data sheet
Píttsburgh Paints Nigeria Lir	nited
1, Coker Street, Coker Bus- Nigeria	stop, Badagry Expressway, Orile Iganmu, Lagos
Tel: 00 234 (0) 8138672483	
e-mail address of person responsible for this SDS	: PS.ACEMEA@ppg.com
1.4 Emergency telephone	: 00234 127 173 85

# **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Product definition : Mixture <u>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</u>

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

number

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 Hazard pictograms : Signal word : Danger

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NOVAGUARD 890 HARDENE	R GREEN
<b>SECTION 2: Hazards</b>	identification
Hazard statements	<ul> <li>Harmful if swallowed.</li> <li>Toxic in contact with skin or if inhaled.</li> <li>Causes severe skin burns and eye damage.</li> <li>May cause an allergic skin reaction.</li> <li>Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	
Prevention	: Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment.
Response	: Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazardous ingredients	<ul> <li>2'-dimethyl-4,4'-methylenebis(cyclohexylamine)</li> <li>N-(3-(trimethoxysilyl)propyl)ethylenediamine</li> <li>2,4,6-tris(dimethylaminomethyl)phenol</li> </ul>
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 requiren	<u>ients</u>
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.
2.3 Other hazards	
Product meets the criteria for PBT or vPvB	: $\mathbf{\overline{P}}$ his mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: None known.

# **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]
N-(3-(trimethoxysilyl)propyl)	EC: 217-164-6	≥1.0 - ≤5.0	Acute Tox. 4, H332	[1]
	English (GB)		Nigeria	2/13

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NOVAGUARD 890 HARDENER G	GREEN				
<b>SECTION 3: Compositi</b>	on/information on ingr	edients			
ethylenediamine	CAS: 1760-24-3		Skin Sei	n. 1, H318 ns. 1, H317 Chronic 3, H412	
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 To Acute To Skin Co Eye Dar	ox. 4, H302 ox. 4, H312 rr. 1C, H314 n. 1, H318 ns. 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>

[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	<ul> <li>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.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.</li> </ul>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>
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 healt	<u>n effects</u>
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.

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<b>SECTION 4: First aid</b>	l measures			
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 immedi	ate medical attention and special treatment needed			
Notes to physician	<ul> <li>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.</li> </ul>			
Specific treatments	: No specific treatment.			
<b>SECTION 5: Firefigh</b>	ting 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 f	rom 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 training.
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, pro	ote	ctive equipment and emergency procedures		
For non-emergency personnel	:	No action shall be taken involving any personal Evacuate surrounding areas. Keep unnecessar entering. Do not touch or walk through spilt ma Provide adequate ventilation. Wear appropriate inadequate. Put on appropriate personal protect	ry and unprotected personnel fro terial. Do not breathe vapour or e respirator when ventilation is	
For emergency responders	:	If specialised clothing is required to deal with the in Section 8 on suitable and unsuitable material 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.		
		English (GB)	Nigeria	4/13

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# **SECTION 6: Accidental release measures**

## 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 spill product.
6.4 Reference to other sections	<ul> <li>See Section 1 for emergency contact information.</li> <li>See Section 8 for information on appropriate personal protective equipment.</li> <li>See Section 13 for additional waste treatment information.</li> </ul>

# **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.
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	

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# **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

Code

## **Occupational exposure limits**

No exposure limit value known.

measurement of chemical agents) Reference to national guidance documents f methods for the determination of hazardous substances will also be required.
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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 meas	<u>ures</u>
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 <u>Skin protection</u>	: Chemical splash goggles and face shield.
Hand 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
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	:

**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 physica	l a	nd chemical properti	es					
<u>Appearance</u>								
Physical state	:	Liquid.						
Colour	:	Green.						
Odour	:	Amine-like. [Strong]						
Odour threshold	:	lot available.						
рН	:	insoluble in water.						
Melting point/freezing point	:	May start to solidify a data for the following Weighted average: -	ingredier	nt: 2,2'-dii				
Initial boiling point and boiling range	:	>37.78°C						
Flash point	:	Open cup: 100°C						
Evaporation rate	:	0.007 (benzyl alcohol	) compar	ed with b	utyl acetate			
Flammability (solid, gas)	:	liquid						
Upper/lower flammability or explosive limits	:	Greatest known rang	e: Lower:	1.3% U	pper: 13% (be	enzyl alco	ohol)	
Vapour pressure : Vapour Pressure at 20°C					Vapour pressure at 50°C			
vapour pressure	÷		Vapou	ir Pressi	ure at 20°C	Vapo	our press	sure at 50°C
vapour pressure	•	Ingredient name	Vapou mm Hg		Method	Vapo mm Hg	kPa	sure at 50°C Method
vapour pressure	•	Ingredient name	-	kPa		mm		
Vapour pressure Vapour density	•		mm Hg	<b>kPa</b> 0.04	Method	mm		
		✓(3-(trimethoxysilyl) propyl)ethylenediamine	mm Hg	<b>kPa</b> 0.04	Method	mm		
Vapour density		№(3-(trimethoxysilyl) propyl)ethylenediamineHighest known value	mm Hg 0.3000246 : 3.7 (Air	kPa 0.04 = 1) (be	Method nzyl alcohol).	mm		
Vapour density Relative density		✓(3-(trimethoxysilyl) propyl)ethylenediamine Highest known value 0.97	mm Hg 0.3000246 : 3.7 (Air	kPa 0.04 = 1) (be	Method nzyl alcohol).	mm		
Vapour density Relative density Solubility(ies) Partition coefficient: n-octanol/	:	✓(3-(trimethoxysilyl) propyl)ethylenediamine Highest known value 0.97 Insoluble in the follow	mm Hg 0.3000246 : 3.7 (Air	kPa 0.04 = 1) (be	Method nzyl alcohol).	mm		
Vapour density Relative density Solubility(ies) Partition coefficient: n-octanol/ water	:	<ul> <li>▶ (3-(trimethoxysilyl) propyl)ethylenediamine</li> <li>Highest known value</li> <li>0.97</li> <li>Insoluble in the follow</li> <li>▶ ot applicable.</li> </ul>	mm Hg 0.3000246 : 3.7 (Air <i>v</i> ing mate	kPa 0.04 = 1) (be rials: colo	Method nzyl alcohol). d water.	mm Hg	kPa	Method
Vapour density Relative density Solubility(ies) Partition coefficient: n-octanol/ water Auto-ignition temperature	:	<ul> <li>✓(3-(trimethoxysilyl) propyl)ethylenediamine</li> <li>Highest known value</li> <li>0.97</li> <li>Insoluble in the follow</li> <li>✓ot applicable.</li> <li>275°C (527°F)</li> </ul>	mm Hg 0.3000246 : 3.7 (Air <i>v</i> ing mate	kPa 0.04 = 1) (be rials: colo	Method nzyl alcohol). d water.	mm Hg	kPa	Method
Vapour density Relative density Solubility(ies) Partition coefficient: n-octanol/ water Auto-ignition temperature Decomposition temperature	:	<ul> <li>✓(3-(trimethoxysilyl) propyl)ethylenediamine</li> <li>Highest known value</li> <li>0.97</li> <li>Insoluble in the follow</li> <li>✓ot applicable.</li> <li>275°C (527°F)</li> <li>Stable under recommended</li> </ul>	mm Hg 0.3000246 : 3.7 (Air ving mate nended st 4 mm <sup>2</sup> /s	kPa 0.04 = 1) (be rials: colo	Method nzyl alcohol). d water.	mm Hg	kPa	Method

## 9.2 Other information

No additional information.

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<b>SECTION 10: Stabilit</b>	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/m <sup>3</sup>	4 hours
(cyclohexylamine)	mists		-	
	LD50 Dermal	Rabbit	>0.2 g/kg	-
	LD50 Oral	Rat	>0.32 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and	Rat	>4178 mg/m <sup>3</sup>	4 hours
	mists			
	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
Øral	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

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# **SECTION 11: Toxicological information**

Froduct/ingre	dient name	Route of exposure	Species	Result
7,4,6-tris(dimethylaminomethyl)phenol		skin	Guinea pig	Sensitising
Conclusion/Summary		ļ.	ļ	ļ
Skin	: There are no dat	a available on the mixtu	ire itself.	
Respiratory	: There are no dat	a available on the mixtu	re itself.	
<u>Mutagenicity</u>				
Conclusion/Summary	: There are no dat	a available on the mixtu	re itself.	
Carcinogenicity				
Conclusion/Summary	: There are no dat	a available on the mixtu	re itself.	
Reproductive toxicity				
Conclusion/Summary	: There are no dat	a available on the mixtu	ire itself.	
<u>Feratogenicity</u>				
Conclusion/Summary	: There are no dat	a available on the mixtu	ire itself.	
Specific target organ toxic	<u>ity (single exposure)</u>	1		
Not available.				
Specific target organ toxic	ity (repeated exposu	re)		
Not available.				
Aspiration hazard				
Not available.				
nformation on likely routes of exposure	: Not available.			
Potential acute health effec	<u>cts</u>			
Inhalation	: Toxic if inhaled.			
Ingestion	: Harmful if swallo	wed.		
Skin contact	: Causes severe b	ourns. Toxic in contact w	with skin. May cause a	an allergic skin reaction
Eye contact	: Causes serious e	eye damage.		
Symptoms related to the p	<u>hysical, chemical an</u>	d toxicological charac	teristics	
Inhalation	: No specific data.			
Ingestion	: Adverse symptor stomach pains	ms may include the follo	wing:	
Skin contact		ns may include the follo	wing:	
	pain or irritation redness			
	blistering may oc	cur		
Eye contact		ns may include the follo	wing:	
	pain	,	5	
	watering			
Delayed and immediate off	redness	nia offecto from chart.	and long term evees	
Delayed and immediate eff	ects as well as chrol	me enects from short a	and long-term expos	
Short torm owneeter				
Short term exposure				
Potential immediate	: Not available.			
Potential immediate effects				
Potential immediate effects Potential delayed effects				
Potential immediate effects Potential delayed effects Long term exposure	<b>S</b> : Not available.			
Potential immediate effects Potential delayed effects				

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# **SECTION 11: Toxicological information**

Potential delayed effect	s : Not available.
Potential chronic health e	ffects
Not available.	
<b>Conclusion/Summary</b>	: 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	: 📈 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
▶ benzyl alcohol	-	-	Readily

## **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.

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# 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		
ackaging			
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.		

# **SECTION 14: Transport information**

	ADR/RID	IMDG	ΙΑΤΑ
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	П	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
	≤5 kg.
IMDG	: The marine pollutant mark is not required when transported in sizes of $\leq 5$ L or $\leq 5$ kg.

: The marine pollutant mark is not required when transported in sizes of  $\leq 5$  L or  $\leq 5$  kg.

English (GB) Nigeria 11/13			
		Nigeria	11/13

Conforms to Regulation (EC)	No. 1907/2006 (REACH), Annex II	
Code : 00269263	Date of issue/Date of rev	ision : 7 November 2021
NOVAGUARD 890 HARDENE	R GREEN	
<b>SECTION 14: Transp</b>	ort information	
IATA : The envir regulation	onmentally hazardous substance mark may appear if req ns.	uired by other transportation
14.6 Special precautions for user	: <b>Transport within user's premises:</b> always transport upright and secure. Ensure that persons transporting event of an accident or spillage.	
14.7 Transport in bulk according to IMO instruments	: Not applicable.	
SECTION 15: Regula	tory information	
EU Regulation (EC) No. 190	nces subject to authorisation e listed. e listed. : Not applicable.	tance or mixture
Not listed.	<u>es (1005/2009/EO)</u>	
Social Security Code, Articles L 461-1 to L 461-7	<ul> <li>penzyl alcohol</li> <li>2,4,6-tris(dimethylaminomethyl)phenol</li> <li>Surveillance médicale spéciale selon l'arrêté du 11 jui</li> <li>Pour les applications des peintures et vernis par pulve</li> </ul>	
Reinforced medical surveillance	: Act of July 11, 1977 determining the list of activities w surveillance: not applicable	hich require reinforced medical
References	: Reinforced medical surveillance ; Decree no. 2001-97 specific rules for the prevention of risks from carcinog and amending the Labour code ; Decree no. 2003-12 to prevention of chemical risks and amending the Lab 26 February 2004 on the placing on the market of bio 88-1231 of 29/12/1988 relating to poisonous preparati 95-517 of 15 May 1997, relating to the classification o article: R231-53 ; Labour code: Occupational air (vent 232-5 to R 232-5-14 ; Labour code: Prevention of che 231-54 to R 231-54-9 ; Labour code: Prevention of fire and R 233-30 ; Labour code: provisions applicable to Labour code: provisions applicable to young workers: R234-16 ; Labour code: Sanitary installations: Art. R 19 July 1976 amending and implementing decree of 2 classified installations for the protection of the environ professional diseases according to article R461-3 of the	gens, mutagens and reprotoxics 54 of 23 December 2003 relating pour code ; Decree no. 2004-187 of cidal products ; Decree no. ions and substances. ; Decree no. of dangerous waste. ; Labour code tilation, air purification): Art. R emical risk: Art.R231-51 and R es: Art.R232-12-13 to R 232-12-29 women: Art. L 234-3 to L 236-6 ; Art. L 234-3 to L 236-6; Art: 232-2 à R 232-2-7 ; Law 76-663 of 21 September 1977 relating to ment ; Tables of anticipated
15.2 Chemical safety assessment	: No Chemical Safety Assessment has been carried ou	

Conforms to Regulation (EC Code : 00269263	(REACH)	Date of issue/Date of revision	: 7 November 2021
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NOVAGUARD 890 HARDENI	ER GREEN		
SECTION 16: Other	information		
Indicates information that	has changed from previou	sly issued version.	
Abbreviations and acronyms	1272/2008] DNEL = Derived No E EUH statement = CL	Labelling and Packaging Regulation [Reg Effect Level P-specific Hazard statement o Effect Concentration	gulation (EC) No.
Full text of abbreviated H statements	H312 Harmful in H314 Causes set H317 May cause H318 Causes set H319 Causes set H319 Causes set H331 Toxic if inh H332 Harmful if i H411 Toxic to aq	ntact with skin. contact with skin. vere skin burns and eye damage. an allergic skin reaction. rious eye damage. rious eye irritation. aled.	
Full text of classifications [CLP/GHS]	: Acute Tox. 3 Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Eye Dam. 1 Eye Irrit. 2 Skin Corr. 1A Skin Corr. 1C Skin Sens. 1 Skin Sens. 1B	ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUAT LONG-TERM (CHRONIC) AQUAT SERIOUS EYE DAMAGE/EYE IRI SERIOUS EYE DAMAGE/EYE IRI SKIN CORROSION/IRRITATION SKIN CORROSION/IRRITATION SKIN SENSITISATION - Category SKIN SENSITISATION - Category	TIC HAZARD - Category 3 RITATION - Category 1 RITATION - Category 2 - Category 1A - Category 1C
<u>History</u>			
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Date of previous issue	: 16 June 2019		
Prepared by	: EHS		
Version	: 3		
<u>Disclaimer</u>			

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