SAFETY DATA SHEET

Date of issue/Date of revision

: 28 November 2022 Version : 3.02



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

1.1 Product identifier	
Product name	: NOVAGUARD 840/890 HARDENER GREEN
Product code	: 00187929
Product type	: Liquid.
Other means of identification	on la constante de la constante
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 : 00966 138473100 extn 1001 number

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

Conforms to Regulation (EC)	No. 1907/2006 (REACH), A	nnex II	
Code : 00187929		Date of issue/Date of revision	: 28 November 2022
NOVAGUARD 840/890 HARD	ENER GREEN		
SECTION 2: Hazards	identification		
Hazard pictograms			
Signal word	: Danger		
Hazard statements	: Harmful if swallowed. Toxic in contact with ski Causes severe skin bur May cause an allergic sl Toxic to aquatic life with	ns and eye damage. kin reaction.	
Precautionary statements			
Prevention	: Wear protective gloves, the environment.	protective clothing and eye or face pro	otection. Avoid release to
Response		ALED: Immediately call a POISON CE ately call a POISON CENTER or docto	
Storage	: Not applicable.		
Disposal	: D íspose of contents and international regulations	l container in accordance with all local,	, regional, national and
Hazardous ingredients	: 2,2'-dimethyl-4,4'-methy N-(3-(trimethoxysilyl)pro	lenebis(cyclohexylamine) pyl)ethylenediamine	
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>nents</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	: This mixture does not co	ontain any substances that are assess	ed to be a PBT or a vPvB.
Other hazards which do not result in classification	: None known.		

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture					
Product/ingredient name	Identifiers	%	Classifica	ation	Specific Conc. Limits, M-factors and ATEs	Туре
		Engl	lish (GB)	United Arab Er	nirates	2/13

Code : 00187929 NOVAGUARD 840/890 HARI		Da	ate of issue/Date of revisi	ion : 28 Noveml	per 2022
SECTION 3: Compo		ion on ii	naredients		
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	ATE [Oral] = 500 mg/ kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (dusts and mists)] = 0.5 mg/l	[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	ATE [Oral] = 1230 mg/ kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[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	ATE [Inhalation (vapours)] = 11 mg/l	[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 - ≤3.4	Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318 See Section 16 for	ATE [Oral] = 1200 mg/ kg ATE [Dermal] = 1280 mg/kg	[1]
			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.

Туре

Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the 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 <u>Potential acute health effects</u>

Code : 00187929	Date of issue/Date of revision : 28 November 202	
NOVAGUARD 840/890 HA	RDENER GREEN	
SECTION 4: First a	aid measures	
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/sy	<u>mptoms</u>	
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 imm	ediate 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: Firefig	abting mossures	

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 fr	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.	

4/13

Code : 00187929

Date of issue/Date of revision

NOVAGUARD 840/890 HARDENER GREEN			
SECTION 6: Accident	tal release measures		
6.1 Personal precautions, pro	otective 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 spill 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	: Put 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.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II			
Code : 00187929	Date of issue/Date of revision : 28 November 2022		
NOVAGUARD 840/890 HARI	ENER GREEN		
SECTION 7: Handlin	g 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	JSES.		

Recommendations	: Not available.
Industrial sector specific solutions	: Not available.

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/ingredien	it name	Exposure limit values	
benzyl alcohol		IPEL (-). TWA: 5 ppm STEL: 10 ppm	
Recommended monitoring procedures	: 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	other engineering	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 measur	<u>es</u>		
Hygiene measures	eating, smoking Appropriate tech Contaminated we contaminated clo	earms and face thoroughly after handling chemical products, before and using the lavatory and at the end of the working period. niques should be used to remove potentially contaminated clothing. ork clothing should not be allowed out of the workplace. Wash othing before reusing. Ensure that eyewash stations and safety se to the workstation location.	
Eye/face protection Skin protection	: Chemical splash	goggles and face shield.	
Hand protection	:		

Conforms to Regulation (EC)	No. 1907/2006 (REAC	H), Annex II	
Code : 00187929		Date of issue/Date of revision	: 28 November 2022
NOVAGUARD 840/890 HARDENER GREEN			
SECTION 8: Exposu	re controls/pers	onal protection	
	worn at all times wh necessary. Consid during use that the noted that the time glove manufacturer protection time of th frequently repeated (breakthrough time When only brief con (breakthrough time The user must che product is the most as included in the u	, impervious gloves complying with an appr nen handling chemical products if a risk ass lering the parameters specified by the glove gloves are still retaining their protective pro- to breakthrough for any glove material may rs. In the case of mixtures, consisting of se ne gloves cannot be accurately estimated. I contact may occur, a glove with a protection greater than 480 minutes according to EN ntact is expected, a glove with a protection greater than 30 minutes according to EN 3 ck that the final choice of type of glove sele appropriate and takes into account the par user's risk assessment.	sessment indicates this is e manufacturer, check operties. It should be y be different for different everal substances, the When prolonged or on class of 6 374) is recommended. class of 2 or higher 874) is recommended. cted for handling this
Gloves	: nitrile neoprene		
Body protection		e equipment for the body should be selected risks involved and should be approved by a ct.	
Other skin protection	based on the task b	ar and any additional skin protection measu being performed and the risks involved and andling this product.	ures should be selected should be approved by a
Respiratory protection	hazards of the proc are exposed to con certified respirators	n must be based on known or anticipated e luct and the safe working limits of the selec icentrations above the exposure limit, they s. Use a properly fitted, air-purifying or air-fe tandard if a risk assessment indicates this i	ted respirator. If workers must use appropriate, ed respirator complying
Environmental exposure controls	they comply with th cases, fume scrubb	ntilation or work process equipment should e requirements of environmental protection pers, filters or engineering modifications to preduce emissions to acceptable levels.	legislation. In some

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

	English (CP) United Arab Emirator 7/42
Viscosity	: < 30 s (ISO 6mm)
Viscosity	: Kinematic (40°C): >21 mm²/s
рН	: Not applicable. insoluble in water.
Decomposition temperature	: Stable under recommended storage and handling conditions (see Section 7).
Auto-ignition temperature	: 275°C (527°F)
Flash point	: Closed cup: 105°C
Upper/lower flammability or explosive limits	: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)
Flammability	: Not available.
Initial boiling point and boiling range	: >37.78°C
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)
Odour threshold	: Not available.
Odour	: Amine-like. [Strong]
Colour	: Green.
Physical state	: Liquid.
<u>Appearance</u>	

Date of issue/Date of revision

: 28 November 2022

NOVAGUARD 840/890 HARDENER GREEN

SECTION 9: Physical and chemical properties

Solubility(ies)	:							
Media		Result						
cold water		Not soluble						
Partition coefficient: n-octa water	anol/ : N	Not applicable.						
Vapour pressure	: [Vapour Pressure at 20°C Vapour pressure at 5					sure at 50°C
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
	I	Ŋ-(3-(trimethoxysilyl) propyl)ethylenediamine	0.3000246	0.04				

		1 137 3						
Evaporation rate	:	0.007 (benzyl ald	cohol) compar	ed with bu	utyl acetate			
Relative density	:	0.97						
Vapour density	:	Highest known v	alue: 3.7 (Air	= 1) (ber	nzyl alcohol).			
Explosive properties	:	The product itse vapour or dust w		,	ne formation o	of an expl	osible mi	xture of
Oxidising properties	:	Product does no	t present an o	xidizing h	azard.			
Particle characteristics								
Median particle size	:	Not applicable.						

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

Date of issue/Date of revision

: 28 November 2022

SECTION 11: Toxicological information

: 00187929

NOVAGUARD 840/890 HARDENER GREEN

Product/ingredient name	Result	Species	Dose	Exposure
2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine)	LC50 Inhalation Dusts and mists	Rat	420 mg/m ³	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 ³	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

: There are no data available on the mixture itself.

Irritation/Corrosion

Code

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	
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 to	<u> (icity (single exposure)</u>
Not available.	
Specific target organ to	<u>kicity (repeated exposure)</u>
Not available.	
Aspiration hazard	
Not available.	
NUL AVAIIADIC.	
Information on likely	: Not available.
routes of exposure	
Potential acute health ef	
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

Conforms to Regulation (EC)	No. 1907/2006 (REACH), A	nnex II	
Code : 00187929		Date of issue/Date of revision	: 28 November 2022
NOVAGUARD 840/890 HARDI	ENER GREEN		
SECTION 11: Toxicol	ogical information		
Symptoms related to the ph	ysical, chemical and toxic	ological characteristics	
Inhalation	: No specific data.		
Ingestion	: Adverse symptoms may stomach pains	include the following:	
Skin contact	: Adverse symptoms may pain or irritation redness blistering may occur	include the following:	
Eye contact	: Adverse symptoms may pain watering redness	include the following:	
Delayed and immediate effe	<u>cts as well as chronic effe</u>	cts from short and long-term expos	<u>ure</u>
<u>Short term exposure</u>			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Long term exposure			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Potential chronic health effe	ects		
Not available.			
Conclusion/Summary	: Not available.		
General	: Once sensitized, a seve very low levels.	re allergic reaction may occur when su	bsequently exposed to
Carcinogenicity	: No known significant eff	ects or critical hazards.	
Mutagenicity	: No known significant eff	ects or critical hazards.	
Reproductive toxicity	: No known significant eff	ects 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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

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

English (GB) United Arab Emirates

Conforms to Regulation (EC) No. 1907/2006 (REACH	H), Annex II	
Code : 00187929	Date of issue/Date of revision	: 28 November 2022
NOVAGUARD 840/890 HARDENER GREEN		

SECTION 12: Ecological information

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	: Not available.
coefficient (K _{oc})	. Net evellette
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 Endocrine disrupting properties

Not available.

12.7 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 Motheda of diapopul	. The generation of wests should be sweided or minimized wherever pessible. Dispessel
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 catalog	<u>aue (EWC)</u>

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

Code : 00187929 NOVAGUARD 840/890 HARDENER GREEN Date of issue/Date of revision

SECTION 13: Disposal considerations

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	IATA
14.1 UN number or ID number	UN2922	UN2922	UN2922
14.2 UN proper shipping nameCORROSIVE LIQUID, TOXIC, N.O.S. (2,2'-dimethyl-4,4'- 		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	Ш	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 ≤5 L or ≤5 kg.IATA: The environmentally hazardous substance mark may appear if required by other transportation
regulations.

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	: Not applicable.
according to IMO	
instruments	

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

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.

English (GB) United Arab Emirates

Conforms to Regulation (EC) No. 1907/2006 (REACH), A	Annex II	
Code : 00187929		Date of issue/Date of revision	: 28 November 2022
NOVAGUARD 840/890 HARD	ENER GREEN		
SECTION 15: Regula	atory information		
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.		
Other national and internat	ional regulations.		
Ozone depleting substance Not listed.	<u>es (1005/2009/EU)</u>		
15.2 Chemical safety assessment	: No Chemical Safety Ass	essment has been carried out.	
SECTION 16: Other	information		
Indicates information that	has changed from previously	vissued version.	
Abbreviations and acronyms	1272/2008] DNEL = Derived No Effe	abelling and Packaging Regulation [Reg ect Level specific Hazard statement Effect Concentration	ulation (EC) No.
Full text of abbreviated H statements	H314Causes severH317May cause anH318Causes seriouH319Causes seriouH331Toxic if inhaleH332Harmful if inhaH411Toxic to aqua	ict with skin. ntact with skin. re skin burns and eye damage. n allergic skin reaction. us eye damage. us eye irritation. rd.	
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	ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUAT LONG-TERM (CHRONIC) AQUAT SERIOUS EYE DAMAGE/EYE IRR SERIOUS EYE DAMAGE/EYE IRR SKIN CORROSION/IRRITATION - SKIN CORROSION/IRRITATION - SKIN SENSITISATION - Category	IC HAZARD - Category 3 ITATION - Category 1 ITATION - Category 2 Category 1A Category 1C
History Date of issue/ Date of revision	: 28 November 2022		
Date of previous issue	: 14 February 2022		
Prepared by	: EHS		
Version	: 3.02		
<u>Disclaimer</u>			

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.