SAFETY DATA SHEET

Date of issue/Date of revision : 2 September 2024 Version : 1.01



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

1.1 Product identifier

Product name : STEELGUARD 951 HARDENER BLACK

Product code : 000001203087

Other means of identification

00477309

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

: Hardener.; 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

: PS.ACEMEA@ppg.com

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]

Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Repr. 2, H361f STOT RE 2, H373 Aquatic Chronic 3, H412

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

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STEELGUARD 951 HARDENER BLACK

SECTION 2: Hazards identification

Hazard pictograms







Danger

Hazard statements : Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Suspected of causing cancer. Suspected of damaging fertility.

May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention: Wear protective gloves, protective clothing and eye or face protection. Do not breathe

vapour.

Response : 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 : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

P280, P260, P304 + P310, P301 + P310, P303 + P361 + P353, P501

Hazardous ingredients : 1,3,5-triazine-2,4,6-triamine

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

and triethylenetetramine m-phenylenebis(methylamine) 3,6-diazaoctanethylenediamin

N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

Supplemental label

elements

: Not applicable.

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

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

Not applicable.

Tactile warning of danger

langer : 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 not result in classification

: Causes digestive tract burns.

English (GB) Saudi Arabia 2/15

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

STEELGUARD 951 HARDENER BLACK

3.2 Mixtures	iviixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
7,3,5-triazine-2,4,6-triamine	REACH #: 01-2119485947-16 EC: 203-615-4 CAS: 108-78-1 Index: 613-345-00-2	≥50 - ≤75	Carc. 2, H351 (oral) Repr. 2, H361f STOT RE 2, H373 (urinary system)	-	[1] [3]
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	≥10 - <25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	-	[1]
m-phenylenebis (methylamine)	REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0	≥10 - ≤22	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 EUH071	ATE [Oral] = 930 mg/ kg ATE [Inhalation (gases)] = 4500 ppm	[1] [2]
3,6-diazaoctanethylenediamin	EC: 203-950-6 CAS: 112-24-3 Index: 612-059-00-5	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 1716 mg/kg ATE [Dermal] = 1465 mg/kg	[1] [2]
carbon	REACH #: 01-2119488894-16 EC: 231-153-3 CAS: 7440-44-0	≥1.0 - ≤5.0	Eye Irrit. 2, H319 STOT SE 3, H335	-	[1] [2]
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	REACH #: 01-2119978265-26 EC: 204-613-6 CAS: 123-26-2	≤0.30	Skin Sens. 1B, H317 Aquatic Chronic 3, H412	-	[1] [2]
			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.

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance of equivalent concern

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

English (GB)	Saudi Arabia	3/15

STEELGUARD 951 HARDENER BLACK

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

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes severe burns. May cause an allergic skin reaction.

Ingestion : Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains

reduced foetal weight increase in foetal deaths skeletal malformations

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.

English (GB) Saudi Arabia 4/15

STEELGUARD 951 HARDENER BLACK

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 harmful 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

halogenated compounds metal oxide/oxides

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, 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 nonemergency 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.

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.

> English (GB) Saudi Arabia 5/15

STEELGUARD 951 HARDENER BLACK

SECTION 6: Accidental release measures

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

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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

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.

English (GB) Saudi Arabia 6/15

STEELGUARD 951 HARDENER BLACK

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		
m-phenylenebis(methylamine)	ACGIH TLV (United States, 7/2023). Absorbed through skin. C: 0.018 ppm		
3,6-diazaoctanethylenediamin	IPEL (-). Absorbed through skin.		
carbon	TWA: 1 ppm ACGIH TLV (United States).		
Carbon	TWA: 10 mg/m³, (Inhalable)		
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-	ACGIH TLV (United States).		
1-amide)	TWA: 3 mg/m³ Form: Respirable		
	TWA: 10 mg/m³ Form: Total dust		

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

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

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

Eye/face protection **Skin protection**

Hand protection

- : Chemical splash goggles and face shield.
- : 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

English (GB)	Saudi Arabia	7/15

STEELGUARD 951 HARDENER BLACK

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.

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

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 Black.

Odour : Amine-like. [Slight] **Odour threshold** Not available.

Melting point/freezing point May start to solidify at the following temperature: 14°C (57.2°F) This is based on

data for the following ingredient: m-phenylenebis(methylamine). Weighted average:

-29.44°C (-21°F)

Ingredient name

Initial boiling point and

boiling range

: >37.78°C

Flammability : Not available.

Upper/lower flammability or

explosive limits

: Greatest known range: Lower: 1.1% Upper: 6.4% (3,6-diazaoctanethylenediamin)

°F

Method

Flash point Closed cup: 119°C

Auto-ignition temperature

carbon <200 <392

Decomposition temperature

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

°C

pН

Not applicable.

Kinematic (40°C): >21 mm²/s **Viscosity**

> 100 s (ISO 6mm) **Viscosity**

Solubility(ies)

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure

Ingredient neme	Vapour Pressure at 20°C			Vapour pressure at 50°		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
carbon	<0.1	<0.013				

Evaporation rate : Not available.

Relative density 1.28

Highest known value: 5.04 (Air = 1) (3,6-diazaoctanethylenediamin). Vapour density

Explosive properties

English (GB) Saudi Arabia 8/15

STEELGUARD 951 HARDENER BLACK

SECTION 9: Physical and chemical properties

The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.

Oxidising properties

: Product does not present an oxidizing hazard.

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 halogenated compounds metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
melamine	LC50 Inhalation Dusts and	Rat	>5190 mg/m ³	4 hours
	mists			
	LD50 Oral	Rat	3161 mg/kg	-
Fatty acids, C18-unsatd., dimers,	LD50 Dermal	Rat	>2000 mg/kg	-
oligomeric reaction products with tall-oil				
fatty acids and triethylenetetramine				
	LD50 Oral	Rat	>2000 mg/kg	-
m-phenylenebis(methylamine)	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rat - Male,	>3100 mg/kg	-
		Female		
	LD50 Oral	Rat	930 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
•	LD50 Oral	Rat	1716 mg/kg	-
N,N'-ethane-1,2-diylbis	LC50 Inhalation Dusts and	Rat	>5.11 mg/l	4 hours
(12-hydroxyoctadecan-1-amide)	mists			
,	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

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

English (GB) Saudi Arabia 9/15

Code : 000001203087 Date of issue/Date of revision : 2 September 2024

STEELGUARD 951 HARDENER BLACK

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
m-phenylenebis(methylamine)	Skin - Irritant Skin - Severe irritant	Human Rat	-	- 4 hours	- 4 hours

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
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitising
m-phenylenebis(methylamine) 3,6-diazaoctanethylenediamin	skin skin	Mouse Guinea pig	Sensitising 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.

Product/ingredient name	Category	Route of exposure	Target organs

Information on likely routes of exposure

: Not available.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.Ingestion : Corrosive to the digestive tract. Causes burns.

Skin contact: Causes severe burns. May cause an allergic skin reaction.

Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

English (GB) Saudi Arabia 10/15

Code : 000001203087 Date of issue/Date of revision : 2 September 2024

STEELGUARD 951 HARDENER BLACK

SECTION 11: Toxicological information

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

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: May cause damage to organs through prolonged or repeated exposure. Once

sensitized, a severe allergic reaction may occur when subsequently exposed to very low

evels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity: No known significant effects or critical hazards.

Reproductive toxicity: Suspected of damaging fertility.

Other information : Not available.

Causes digestive tract burns. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

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

English (GB)	Saudi Arabia	11/15

Code : 000001203087 Date of issue/Date of revision : 2 September 2024

STEELGUARD 951 HARDENER BLACK

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
melamine Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Acute EC50 200 mg/l EC10 1.78 mg/l	Daphnia Algae	48 hours 72 hours
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)	Acute EC50 29 to 43 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 94 mg/l	Daphnia - Daphnia magna	48 hours

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	-	63 % - 28 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-	-	Not readily
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1,3,5-triazine-2,4,6-triamine m-phenylenebis(methylamine)	-1.22 0.18	3.8 2.69	Low Low
3,6-diazaoctanethylenediamin N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)	-1.66 to -1.4 >6	- -	Low High

12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

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.

English (GB)	Saudi Arabia	12/15
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Code : 000001203087 Date of issue/Date of revision : 2 September 2024

STEELGUARD 951 HARDENER BLACK

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**
- : The classification of the product may meet the criteria for a hazardous waste.

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.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	UN3066	UN3066	UN3066
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	8	8	8
14.4 Packing group	II	II	II
14.5 Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

ADR/RID : None identified.

Tunnel code : (E)

IMDG : None identified.IATA : None identified.

English (GB)	Saudi Arabia	13/15

STEELGUARD 951 HARDENER BLACK

SECTION 14: Transport information

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

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Substance of equivalent concern for human health	melamine	Candidate	D(2022) 9120-DC	1/17/2023
Substance of equivalent concern for environment	melamine	Candidate	D(2022) 9120-DC	1/17/2023

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. **Explosive precursors** : Not applicable. Ozone depleting substances (1005/2009/EU)

Not listed.

15.2 Chemical safety

assessment

: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

Full text of abbreviated H

statements

English (GB) Saudi Arabia 14/15

STEELGUARD 951 HARDENER BLACK

SECTION 16: Other information

ŧ	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
	H361f	Suspected of damaging fertility.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H411	Toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Acute Tox. 4 ACUTE TOXICITY - Category 4
 Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
 Aquatic Chronic 3 CARCINOGENICITY - Category 2

Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Repr. 2 REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1 SKIN SENSITISATION - Category 1

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

Harmful to aquatic life with long lasting effects.

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED

EXPOSURE - Category 2

STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE

EXPOSURE - Category 3

History

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revision

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Prepared by : EHS Version : 1.01

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English (GB) Saudi Arabia 15/15