

SAFETY DATA SHEET



Date of issue/Date of revision

: 28 April 2025

Version

: 3

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

1.1 Product identifier

Product name : STEELGUARD 951 HARDENER BLACK

Product code : 000001190332

Other means of identification

00453045; 00472633 ; 00476980

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.

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

1.3 Details of the supplier of the safety data sheet

PPG Protective and Marine Coatings Pty Ltd
7 Arnold Street,
Alrode, Alberton, Gauteng
South Africa
Tel: 0027 11 389 4800

**e-mail address of person
responsible for this SDS** : PS.ACEMEA@ppg.com

**1.4 Emergency telephone
number** : +27 (0)861 555 777

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

Hazard pictograms :



Code : 000001190332 **Date of issue/Date of revision** : 28 April 2025
STEELGUARD 951 HARDENER BLACK

SECTION 2: Hazards identification

Signal word	: 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.
<u>Precautionary statements</u>	
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 and 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.
<u>Special packaging requirements</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 according to Regulation (EC) No. 1907/2006, Annex XIII	: 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture
---------------------	-----------

Code : 000001190332 **Date of issue/Date of revision** : 28 April 2025
STEELGUARD 951 HARDENER BLACK

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
1,3,5-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]
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]
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 See Section 16 for the full text of the H statements declared above.	-	[1] [2]

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.

Type

[1] 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.

Code : 000001190332

Date of issue/Date of revision

: 28 April 2025

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.

Code : 000001190332	Date of issue/Date of revision : 28 April 2025
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 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.

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.

Code : 000001190332

Date of issue/Date of revision

: 28 April 2025

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.

Code	: 000001190332	Date of issue/Date of revision	: 28 April 2025
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) carbon	ACGIH TLV (United States, 1/2024) Absorbed through skin. C: 0.018 ppm. ACGIH TLV (United States) TWA: 10 mg/m³ (Inhalable). TWA: 3 mg/m³ (Respirable 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** : Chemical splash goggles and face shield.
- Skin protection**
- 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.

Code : 000001190332

Date of issue/Date of revision

: 28 April 2025

STEELGUARD 951 HARDENER BLACK

SECTION 8: Exposure controls/personal protection

Other skin protection

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

Respiratory protection

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

Environmental exposure controls

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

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 : Grey.

Odour : Amine-like. [Slight]

Odour threshold : Not available.

Melting point/freezing point : Not determined.

Initial boiling point and boiling range : >37.78°C

Flammability : Not determined. There are no data available on the mixture itself.

Upper/lower flammability or explosive limits : Not available.

Flash point : Closed cup: 119°C

Auto-ignition temperature

Ingredient name	°C	°F	Method
carbon	<200	<392	

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

pH : Not applicable. insoluble in water.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): >21 mm²/s

Viscosity : > 100 s (ISO 6mm)

Solubility(ies)

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/ water : Not applicable.

Vapour pressure

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

Code	: 000001190332	Date of issue/Date of revision	: 28 April 2025
STEELGUARD 951 HARDENER BLACK			

SECTION 9: Physical and chemical properties

Relative density	: 1.28
Explosive 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.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

9.2 Other information

Explosive 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.

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

The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility. Suspected of damaging the unborn child.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

Acute toxicity

Product/ingredient name	Result	Dose / Exposure
1,3,5-triazine-2,4,6-triamine	Rat - Oral - LD50 Rat - Inhalation - LC50 Dusts and mists	3161 mg/kg >5190 mg/m³ [4 hours]
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Rat - Dermal - LD50	>2000 mg/kg
1,3-Benzenedimethanamine	Rat - Oral - LD50 Rat - Oral - LD50 Rat - Male, Female - Dermal - LD50 Rat - Inhalation - LC50 Gas.	>2000 mg/kg 930 mg/kg >3100 mg/kg 700 ppm [1 hours]

Code : 000001190332 **Date of issue/Date of revision** : 28 April 2025
STEELGUARD 951 HARDENER BLACK

3,6-diazaoctanethylenediamin	<i>Toxic effects:</i> Eye - Lacrimation Lung, Thorax, or Respiration - Respiratory depression Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Oral - LD50 Rat - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	1465 mg/kg 1716 mg/kg >2000 mg/kg >2000 mg/kg >5.11 mg/l [4 hours]
AMIDE		

Acute toxicity estimates

Route	ATE value
Oral	5273.83 mg/kg
Dermal	67271.88 mg/kg
Inhalation (gases)	27348.97 ppm

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

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

Conclusion/Summary

Skin : Causes severe burns.

Eyes : Causes serious eye damage.

Respiratory : Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Product/ingredient name	Test	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Mouse - skin	Result: Sensitising
m-phenylenebis(methylamine)	Mouse - skin OECD 429	Result: Sensitising
3,6-diazaoctanethylenediamin	Guinea pig - skin OECD 406	Result: Sensitising

Conclusion/Summary

Skin : May cause an allergic skin reaction.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child.

Specific target organ toxicity (single exposure)

Code : 000001190332	Date of issue/Date of revision : 28 April 2025
STEELGUARD 951 HARDENER BLACK	

Product/ingredient name	Category	Route of exposure	Target organs
Carbon	Category 3	-	Respiratory tract irritation

Conclusion/Summary (Product) :

Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
1,3,5-triazine-2,4,6-triamine	Category 2	-	urinary system

Conclusion/Summary (Product) :

May cause damage to organs through prolonged or repeated exposure.

Based on available data, the classification criteria are not met.

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
- 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 effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

Code : 000001190332 **Date of issue/Date of revision** : 28 April 2025
STEELGUARD 951 HARDENER BLACK

- 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 levels.
- 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

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Dose / Exposure
3,5-triazine-2,4,6-triamine	Acute - EC50	Daphnia	200 mg/l [48 hours]
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10	Algae	1.78 mg/l [72 hours]
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)	Acute - EC50	Daphnia - <i>Daphnia magna</i>	94 mg/l [48 hours]
	Acute - EC50	Algae - <i>Pseudokirchneriella subcapitata</i>	29 to 43 mg/l [72 hours]

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

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]		

Code : 000001190332 **Date of issue/Date of revision** : 28 April 2025
STEELGUARD 951 HARDENER BLACK

SECTION 12: Ecological information

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	LogP _{ow}	BCF	Potential
3,5-triazine-2,4,6-triamine	-1.22	3.8	Low
m-phenylenebis(methylamine)	0.18	2.69	Low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	Low
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	>6	-	High

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logK _{oc}	K _{oc}
3,5-triazine-2,4,6-triamine	1.66	45.8075
m-phenylenebis(methylamine)	1.67	46.5812
3,6-diazaoctanethylenediamin	1.53	33.6474
carbon	0.5	3.18035
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	4.31	20542.3

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

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

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

Code : 000001190332 **Date of issue/Date of revision** : 28 April 2025
STEELGUARD 951 HARDENER BLACK

SECTION 13: Disposal considerations

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

Hazardous waste : Yes.

European waste catalogue (EWC)

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

Packaging

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

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

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

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.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

Code : 000001190332

Date of issue/Date of revision : 28 April 2025

STEELGUARD 951 HARDENER BLACK

SECTION 14: Transport information

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	Recommended	D(2022) 9120-DC	2/7/2024
Substance of equivalent concern for environment	melamine	Recommended	D(2022) 9120-DC	2/7/2024

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

Other national and international regulations.

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

VOC for Ready-for-Use Mixture : IIA/j. Two-pack reactive performance coatings for specific end use such as floors. EU limit values: 500 g/l (2010.)
This product contains a maximum of 500 g/l VOC.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated H statements : 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.

English (GB)

South Africa

15/16

Code	: 000001190332	Date of issue/Date of revision	: 28 April 2025
STEELGUARD 951 HARDENER BLACK			

SECTION 16: Other information

Full text of classifications [CLP/GHS]	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.
	H412	Harmful to aquatic life with long lasting effects.
	EUH071	Corrosive to the respiratory tract.
	Acute Tox. 4	ACUTE TOXICITY - Category 4
	Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
	Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
	Carc. 2	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. 1A	SKIN SENSITISATION - Category 1A
	Skin Sens. 1B	SKIN SENSITISATION - Category 1B
	STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
	STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

History	
Date of issue/ Date of revision	: 28 April 2025
Date of previous issue	: 17 October 2024
Prepared by	: EHS
Version	: 3

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