

1. Identification

Product identifier	NOVOCOAT™ SC1100 PRIMER/SEALER PART B HARDENER, NOVOLITE REPAIR MORTAR PART B HARDENER
Other means of identification	None.
Recommended use	Not available.
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name	Armor Limited, Inc.
Address	2410 US-15 South, Sumter, SC 29150

After hours telephone number	1-877-982-7667
Normal work hours telephone number	1-877-982-7667
Website	www.armor-inc.com
E-mail	customerservice@armor-inc.com
Emergency 24-hour telephone number	CHEMTREC North America: +1-800-424-9300, International: +1-703-527-3887
Information on operation hours	8:00 a.m. to 5:00 p.m.

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation Category 1	
	Serious eye damage/eye irritation Category 1	
	Sensitization, skin Category 1	
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Causes severe skin burns and eye damage. Causes serious eye damage. May cause an allergic skin reaction.
Precautionary statement	
Prevention	Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace.
Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Gently wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment see Section 4 of this SDS. If skin irritation or rash occurs: Get medical advice/attention.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
FATTY ACIDS, TALL-OIL REACTION PRODUCTS WITH TETRAETHYLENEPENTAMINE		68605-86-7	40 - 50
ALCOHOLS, C9-11, ETHOXYLATED		68439-46-3	10 - 20
AMINE		Proprietary	10 - 20
POLYAMIDOAMINE		Proprietary	10 - 20
3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE TETRAETHYLENEPENTAMINE		112-57-2	1 - 10
POLYETHYLENEAMINE		Proprietary	< 1
Other components below reportable levels			8.72604

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse. Call a physician or poison control center immediately.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Call a physician or poison control center immediately.

Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Burning pain and severe corrosive skin damage. Abdominal pain. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Difficulty in breathing. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. Water runoff can cause environmental damage.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Extinguish all flames in the vicinity. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

Environmental precautions

7. Handling and storage

Precautions for safe handling

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Do not use in areas without adequate ventilation. When using, do not eat, drink or smoke. Wash thoroughly after handling. Observe good industrial hygiene practices. Do not empty into drains. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OARS. Workplace Environmental Exposure Level (WEEL) Guide

Components	Type	Value	Form
3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE TETRAETHYLENENEPENTAMINE E (CAS 112-57-2)	TWA	5 mg/m ³	Aerosol.
		1 ppm	Aerosol.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US WEEL Guides: Skin designation

3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE
TETRAETHYLENENEPENTAMINE (CAS 112-57-2) Can be absorbed through the skin.

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical goggles and face shield are recommended.

Skin protection

Hand protection

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Golden to Light Amber
Odor	Ammoniacal. Amine-like.
Odor threshold	Not available.
pH	Alkaline
Melting point/freezing point	-22 °F (-30 °C) estimated
Initial boiling point and boiling range	Not available.
Flash point	325.0 °F (162.8 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Partial
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	610 °F (321.11 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	7.98 estimated
Specific gravity	0.9576 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Peroxides. Strong oxidizing agents. This product may react with strong acids. This product may react with strong alkalies. Chlorine.
Hazardous decomposition products	If product is burned hazardous gases such as oxides of carbon and nitrogen and various hydrocarbons may be produced.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns and eye damage. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE TETRAETHYLENEPENTAMINE (CAS 112-57-2)		
Acute		
Dermal		

LD50 Rabbit 0.66 g/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization Corrosive to skin and eyes. Causes severe skin burns. May cause an allergic skin reaction. May cause allergic skin disorders in sensitive individuals.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

Further information May cause allergic respiratory and skin reactions.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
NOVOCOATT™ SC1100 PRIMER/SEALER PART B HARDENER, NOVOLITE REPAIR MORTAR PART B HARDENER		
Aquatic		
Crustacea	EC50	Daphnia 32.2587 mg/l, 48 hours
Fish	LC50	Fish 42.4971 mg/l, 96 hours
Acute		
Crustacea	EC50	Daphnia 17.0008 mg/l, 48 hours estimated
Fish	LC50	Fish 35.1741 mg/l, 96 hours estimated
Components	Species	Test Results
ALCOHOLS, C9-11, ETHOXYLATED (CAS 68439-46-3)		
Aquatic		
Acute		
Crustacea	EC50	Water flea (Daphnia magna) 2.9 - 8.5 mg/l, 48 hours

Components	Species	Test Results
Fish	LC50	Fathead minnow (Pimephales promelas) 6 - 12 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

3,6,9-TRIAZAUDECAMETHYLENEDIAMINE
TETRAETHYLENEPENTAMINE

1.503

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Dispose of this material and its container to hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH ≤2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

UN number	UN2735
UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Polyamidoamine)
Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Label(s)	8
Packing group	III
Environmental hazards	
Marine pollutant	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB3, T7, TP1, TP28
Packaging exceptions	154
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN2735
UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Polyamidoamine)
Transport hazard class(es)	
Class	8
Subsidiary hazard	-
Packing group	III
Environmental hazards	
ERG Code	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	

Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN2735
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UN proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (Polyamidoamine)

Transport hazard class(es)

Class 8

Subsidiary hazard -

Packing group III

Environmental hazards

Marine pollutant No.

EmS F-A, S-B

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	08-07-2024
Version #	01
Further information	HMIS® is a registered trade and service mark of the NPCA.
NFPA ratings	Health: 3 Flammability: 1 Instability: 0
References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Ergon Armor cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.
Revision information	Hazard(s) identification: Response Composition / Information on Ingredients: Disclosure Overrides First-aid measures: Indication of immediate medical attention and special treatment needed First-aid measures: General information Physical & Chemical Properties: Multiple Properties GHS: Classification