



SAFETY DATA SHEET STRONGCOAT TOPPING HARDENER

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

1.1. Product identifier

Product name STRONGCOAT TOPPING HARDENER
Internal identification SCTOPPINGH/11

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Component of epoxy coating system
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Don Construction Products Ltd.,
 Churnetside Business Park,
 Station Road,
 Cheddleton,
 Staffordshire ST13 7RS

Tel: 01538 361799 Mon-Fri 08:30 - 17:00 (excl bank holidays)
 Fax: 01538 361899
 E-Mail: info@donconstruction.co.uk

1.4. Emergency telephone number

Emergency telephone 01538 361799 Mon-Fri 8.30am - 5.00pm (excluding Bank Holidays)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified
Health hazards Eye Dam. 1 - H318

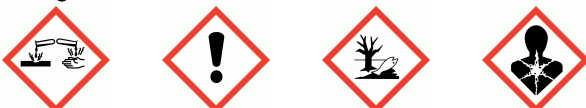
Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 3;R62,R63. C;R34. R43. N;R51/53.

Human health The product contains a sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals. This product can cause burns, Contains a substance with possible risk of harm to the unborn child. Contains a substance with possible risk of impaired fertility.

Environmental The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Pictogram



STRONGCOAT TOPPING HARDENER

Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P260 Do not breathe vapour/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P313 Get medical advice/attention.
Contains	DIETHYLENETRIAMINE, NONYLPHENOL
Supplementary precautionary statements	P262 Do not get in eyes, on skin, or on clothing. P273 Avoid release to the environment. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P321 Specific treatment (see medical advice on this label). P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NONYLPHENOL	10-30%
CAS number: 25154-52-3	EC number: 246-672-0
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302	Repr. Cat. 3;R62,R63 C;R34 Xn;R22 N;R50/53
Skin Corr. 1B - H314	
Repr. 2 - H361fd	
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
DIETHYLENETRIAMINE	1-10%
CAS number: 111-40-0	EC number: 203-865-4
Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1B - H314	C;R34 Xn;R21/22 R43
Skin Sens. 1 - H317	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Eye Dam. 1 - H318	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments Amine curing agent

SECTION 4: First aid measures

STRONGCOAT TOPPING HARDENER

4.1. Description of first aid measures

General information	Remove affected person from source of contamination.
Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	May cause irritation.
Ingestion	May cause discomfort if swallowed.
Skin contact	May cause serious chemical burns to the skin. May cause skin irritation/eczema.
Eye contact	Severe irritation, burning and tearing.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Toxic gases/vapours/fumes of: Oxides of the following substances: Carbon. Nitrogen. No unusual fire or explosion hazards noted.
Hazardous combustion products	Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid inhalation of vapours and contact with skin and eyes. Evacuate non-essential personnel from the spill area. Use suitable respiratory protection if ventilation is inadequate.
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6.2. Environmental precautions

STRONGCOAT TOPPING HARDENER

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid discharge into drains or watercourses or onto the ground. Contain spillages with sand, earth or any suitable absorbent material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with sand or other inert absorbent. Collect spillage in containers, seal securely and deliver for disposal as hazardous waste.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using the product. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Avoid inhalation of vapours/spray and contact with skin and eyes. Provide adequate ventilation. Use approved respirator if air contamination is above an acceptable level.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store in closed original container at temperatures between 5°C and 30°C. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

DIETHYLENETRIAMINE

Long-term exposure limit (8-hour TWA): WEL 1 ppm 4,3 mg/m³

Short-term exposure limit (15-minute): WEL

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

Ingredient comments Due to the hazardous nature of ingredients, exposure should be minimal.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Personal protection

Always check applicability with your supplier of protective equipment.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

STRONGCOAT TOPPING HARDENER

Hand protection	It is recommended that chemical-resistant, impervious gloves are worn. Nitrile gloves to BSEN374 are recommended. Break through times can vary depending on thickness, use and source. Change gloves regularly.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.
Hygiene measures	Provide eyewash station. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Wash contaminated clothing before reuse.
Respiratory protection	In case of inadequate ventilation use a respirator suitable for organic vapours. Consult respirator manufacturer for specific advice.
Environmental exposure controls	Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Amber.
Odour	Amine.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not applicable.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.00 approx @ 20°C
Bulk density	Not determined.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not determined.
Viscosity	1800 approx cP @ 20°C
Explosive properties	Not applicable.

STRONGCOAT TOPPING HARDENER

Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.
Comments	Information given is applicable to the product in its ready-to-use form.
9.2. Other information	
Other information	None.
Refractive index	Not determined.
Particle size	Not applicable.
Molecular weight	Not determined.
Volatility	Not determined.
Saturation concentration	Not applicable.
Critical temperature	Not determined.
Volatile organic compound	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Strong alkalis. Strong oxidising agents. Acids.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur. No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid Considerable exothermic reaction can occur when mixed with epoxide resins

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No information available.

Acute toxicity - oral

Notes (oral LD₅₀) No specific test data are available.

ATE oral (mg/kg) 2,941.17647059

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

ATE dermal (mg/kg) 15,714.28571429

STRONGCOAT TOPPING HARDENER

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.,Causes severe burns.

Animal data

No specific test data are available.

Human skin model test

No specific test data are available.

Extreme pH

No specific test data are available.

Serious eye damage/irritation

Serious eye damage/irritation Corrosivity to eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation No specific test data are available.

Skin sensitisation

Skin sensitisation No specific test data are available.

Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Genotoxicity - in vivo Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

IARC carcinogenicity

Not listed.

Reproductive toxicity

Reproductive toxicity - fertility Suspected of damaging fertility.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not relevant.

General information

Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations.

Inhalation

Vapours may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing.

Ingestion

May cause chemical burns in mouth, oesophagus and stomach.

Skin contact

Causes burns. May cause sensitisation by skin contact.

Eye contact

May cause chemical eye burns.

Acute and chronic health hazards

This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns.

Route of entry

Skin and/or eye contact

Target organs

Eyes Skin

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Medical symptoms Prolonged or repeated exposure may cause the following adverse effects: Allergic rash.
Chemical burns.

Medical considerations Skin disorders and allergies. Splash in eye requires examination by eye specialist.

SECTION 12: Ecological Information

Ecotoxicity The product should not be allowed to enter drains, sewers or watercourses. Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity Not measured. Do not allow to enter waterways or drains

Acute toxicity - fish Not determined

Acute toxicity - aquatic invertebrates Not determined.

Acute toxicity - aquatic plants Not determined.

Acute toxicity - microorganisms Not determined.

Acute toxicity - terrestrial Not determined.

Chronic toxicity - fish early life stage Not determined.

Short term toxicity - embryo and sac fry stages Not determined.

Chronic toxicity - aquatic invertebrates Not determined.

Ecological information on ingredients.

NONYLPHENOL

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 0.209 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.085 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 0.41 mg/l, Algae

Acute toxicity - microorganisms EC₅₀, 3 hours: 950 mg/l, Activated sludge

Chronic aquatic toxicity

M factor (Chronic) 1

Chronic toxicity - fish early life stage NOEC, 91 days: 0.006 mg/l, Fish

STRONGCOAT TOPPING HARDENER

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.024 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Phototransformation Not determined.

Stability (hydrolysis) Not determined.

Biodegradation Not determined.

Biological oxygen demand Not determined.

Chemical oxygen demand Not determined.

Ecological information on ingredients.

NONYLPHENOL

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

NONYLPHENOL

Partition coefficient log Pow: 5.4

12.4. Mobility in soil

Mobility The product is non-volatile.

Adsorption/desorption coefficient Not determined.

Henry's law constant Not determined.

Surface tension Not determined.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Small quantities may be treated with an equivalent quantity of product resin, allowed to cure and disposed of as low hazard waste. Larger quantities should be disposed of as hazardous waste via a licensed waste operator. Product containers must not be re-used without commercial cleaning.

SECTION 14: Transport information

STRONGCOAT TOPPING HARDENER

14.1. UN number

UN No. (ADR/RID)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, N.O.S. (NONYLPHENOL)
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (NONYLPHENOL)
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (NONYLPHENOL)
Proper shipping name (ADN)	CORROSIVE LIQUID, N.O.S. (NONYLPHENOL)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID label	8
IMDG class	8
ICAO class/division	8

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-A, S-B
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
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STRONGCOAT TOPPING HARDENER

Guidance	Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations.
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	Don Construction Products Ltd. Technical Datasheet.
Key literature references and sources for data	Health and Safety Executive Guidance Note EH40 (amended annually). Workplace Exposure Limits.
Revision comments	Section 9: update. Section 11 update. Section 12 update.
Revision date	07/06/2016
Revision	11
Supersedes date	25/04/2014
SDS status	Approved.
Risk phrases in full	R21/22 Harmful in contact with skin and if swallowed. R22 Harmful if swallowed. R34 Causes burns. R43 May cause sensitisation by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R62 Possible risk of impaired fertility. R63 Possible risk of harm to the unborn child.
Hazard statements in full	H302 Harmful if swallowed. H318 Causes serious eye damage. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.