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
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Repr. 2 - H361fd
Eye Dam. 1 - H318
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

Classification (67/548/EEC or 1999/45/EC)
Repr. Cat. 3;R62,R63 C;R34 Xn;R22 N;R50/53

DIETHYLENETRIAMINE **1-10%**

CAS number: 111-40-0 EC number: 203-865-4

Classification
Skin Corr. 1B - H314
Skin Sens. 1 - H317
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Eye Dam. 1 - H318

Classification (67/548/EEC or 1999/45/EC)
C;R34 Xn;R21/22 R43

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

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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.

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.

6.2. Environmental precautions

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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.

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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.

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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 LD_{50})	No specific test data are available.
ATE oral (mg/kg)	2,941.17647059

Acute toxicity - dermal

Notes (dermal LD_{50})	No specific test data are available.
ATE dermal (mg/kg)	15,714.28571429

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Acute toxicity - inhalation

Notes (inhalation LC_{50}) 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	LC_{50}, 96 hours: 0.209 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 0.085 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 0.41 mg/l, Algae
Acute toxicity - microorganisms	EC_{50}, 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

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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

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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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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.