SAFETY DATA SHEET
NITOCOTE EP405 BASE

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

1.1. Product identifier

Product name NITOCOTE EP405 BASE

Product number A1754104UK9, A1764344UK9

UFI UFI: UW50-809W-0002-QP5U, Blue., UFI: F060-S009-900K-C0RW, White.

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

Identified uses Base component of two part epoxy system

1.3. Details of the supplier of the safety data sheet

Supplier

Fosroc International Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3XN
England
Tel: +44 (0) 1827 262222
Fax: +44 (0) 1827 262444
enquiryuk@fosroc.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Human health The product is irritating to eyes and skin. May cause sensitisation by skin contact.

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

Hazard pictograms

Signal word Warning

NITOCOTE EP405 BASE

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing vapour/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol, OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE **10-30%**

CAS number: 1675-54-3 EC number: 216-823-5

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411

TITANIUM DIOXIDE **10-30%**

CAS number: 13463-67-7 EC number: 236-675-5 REACH registration number: 01-2119489379-17-XXXX

Classification
Not Classified

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PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER		10-30%
CAS number: 3101-60-8	EC number: 221-453-2	

Classification
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol		5-10%
CAS number: 9003-36-5	EC number: 500-006-8	

Classification
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS		1-5%
CAS number: 68609-97-2	EC number: 271-846-8	

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317

XYLENE		<1%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues.

Inhalation Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

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Eye contact Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. 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 respiratory system irritation.

Ingestion May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact Skin irritation. May cause sensitisation by skin contact.

Eye contact Irritation of eyes and mucous membranes.

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 alcohol-resistant foam, carbon dioxide, dry powder or water fog.

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 No unusual fire or explosion hazards noted.

Hazardous combustion products Carbon monoxide (CO). Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known. Control run-off water by containing and keeping it out of sewers and watercourses.

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 protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For waste disposal, see section 13.

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Usage precautions For professional users only. Provide adequate ventilation. Avoid the formation of mists. Avoid inhalation of vapours/spray and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

Storage class Chemical storage.

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

TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³
Sk

ISO-BUTANOL

Long-term exposure limit (8-hour TWA): WEL 50 ppm 154 mg/m³
Short-term exposure limit (15-minute): WEL 75 ppm 231 mg/m³

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through the skin.

Ingredient comments WEL = Workplace Exposure Limits

bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE (CAS: 1675-54-3)

DNEL
Workers - Dermal; Short term systemic effects: 8.33 mg/kg/day
Workers - Inhalation; Short term systemic effects: 12.25 mg/kg/day
Workers - Dermal; Long term systemic effects: 8.33 mg/kg/day
Workers - Inhalation; Long term systemic effects: 12.25 mg/kg/day
Consumer - Dermal; Short term systemic effects: 3.571 mg/kg/day
Consumer - Oral; Short term systemic effects: 0.75 mg/kg/day
Consumer - Dermal; Long term systemic effects: 3.571 mg/kg/day
Consumer - Oral; Long term systemic effects: 0.75 mg/kg/day

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL
Industry - Inhalation; Long term local effects: 10 mg/m³
Consumer - Oral; Long term systemic effects: 700 mg/kg/day

PNEC
- Fresh water; 0.127 mg/l
- Sediment (Freshwater); >=1000 mg/kg
- marine water; 1 mg/l
- Sediment (Marinewater); >= 100 mg/kg
- Soil; 100 mg/kg
- STP; 100 mg/l

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PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER (CAS: 3101-60-8)

DNEL
Workers - Inhalation; Long term, Short term systemic effects: 19.6 mg/m³
Workers - Inhalation; Long term local effects: 19.6 mg/m³
Workers - Dermal; Long term, Short term systemic effects: 5.6 mg/kg/day
Workers - Dermal; Long term, Short term local effects: 1.6 µg/cm2

PNEC
- Fresh water; 7.5 µg/l
- marine water; 0.75 µg/l
- STP; 100 mg/l

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (CAS: 9003-36-5)

DNEL
Workers - Inhalation; Long term systemic effects: 29.39 mg/m³
Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day
Workers - Dermal; Short term local effects: 8.3 µg/cm2

PNEC
- Fresh water; 0.003 mg/l
- marine water; 0.0003 mg/l
- STP; 10 mg/l

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS (CAS: 68609-97-2)

DNEL
Workers - Inhalation; Long term systemic effects: 3.6 mg/m³
Workers - Dermal; Long term systemic effects: 1 mg/kg bw/day

PNEC
- Fresh water; 0.0072 mg/l
- marine water; 0.00072 mg/l

XYLENE (CAS: 1330-20-7)

DNEL
Workers - Inhalation; Long term systemic effects: 77 mg/m³
Workers - Inhalation; Short term systemic effects: 289 mg/m³
Workers - Dermal; Long term systemic effects: 180 mg/kg/day

PNEC
- Fresh water; 0.327 mg/l
- marine water; 0.327 mg/l
- STP; 6.58 mg/l

ISO-BUTANOL (CAS: 78-83-1)

DNEL
Workers - Inhalation; Long term local effects: 310 mg/m³

PNEC
- Fresh water; 0.4 mg/l
- marine water; 0.04 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact.
Hygiene measures	Provide eyewash station.
Respiratory protection	No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Blue. or White.
Odour	Mild.
Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	> 200°C @ 1 atm
Flash point	> 150°C
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not applicable.
Vapour pressure	0.1 kPa @ 20°C
Vapour density	Not determined.
Relative density	1.90 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.

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Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

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, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products	When heated, vapours/gases hazardous to health may be formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	Gas or vapour may irritate the respiratory system.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.
Route of exposure	Skin and/or eye contact

Toxicological information on ingredients.

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	19,200.0
Species	Rat
ATE oral (mg/kg)	19,200.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	4,500.0

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Species	Rat
Notes (dermal LD_{50})	LD_{50} >2000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	4,500.0

XYLENE

Acute toxicity - dermal	
ATE dermal (mg/kg)	1,100.0
Carcinogenicity	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SECTION 12: Ecological information

Ecotoxicity Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity The product contains a substance which is harmful to aquatic organisms.

Ecological information on ingredients.

PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 96 hours: 7.5 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 9 mg/l, Pseudokirchneriella subcapitata

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 96 hours: 1 - 10 mg/l, Fish LC_{50}, 96 hours: 1800 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1 - 10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 844 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability The product is not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility Viscous liquid. Insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

NITOCOTE EP405 BASE

Ecological information on ingredients.

PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER

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 None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, PARATERTIARY BUTYL PHENYL GLYCIDYL ETHER)

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

IMDG class 9

ICAO class/division 9

ADN class 9

NITOCOTE EP405 BASE

Transport labels

14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(-)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

SECTION 15: Regulatory information

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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 453/2010 of 20 May 2010.
Guidance	Workplace Exposure Limits EH40. Respiratory protective equipment at work (HSG53).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

NITOCOTE EP405 BASE

General information	The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	07/09/2020
Revision	3c
Supersedes date	25/10/2019
SDS number	11903
Hazard statements in full	H226 Flammable liquid and vapour. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H411 Toxic to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

SAFETY DATA SHEET
NITOCOTE EP405 HARDENER

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

1.1. Product identifier

Product name NITOCOTE EP405 HARDENER

Product number A1754116 UK9

UFI UFI: 1V10-F0V7-K00T-MMST

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

Identified uses Hardener component of two part epoxy system

1.3. Details of the supplier of the safety data sheet

Manufacturer

Fosroc International Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3XN
England
Tel: +44 (0) 1827 262222
Fax: +44 (0) 1827 262444
enquiryuk@fosroc.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361f

Environmental hazards Aquatic Chronic 1 - H410

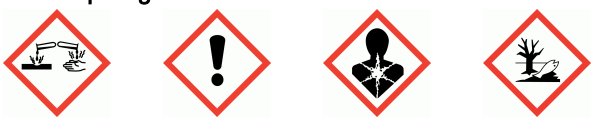
Human health Contains a substance/a group of substances which may impair fertility. Contains a substance/a group of substances which may damage the unborn child. May cause sensitisation by skin contact. Causes burns. Irritating to respiratory system.

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

NITOCOTE EP405 HARDENER

Hazard pictograms



Signal word	Danger
Hazard statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361f Suspected of damaging fertility. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Contains	4-TERT-BUTYLPHENOL, 1,3-BIS(AMINOMETHYL)BENZENE (MXDA), TRIMETHYLHEXANE-1,6-DIAMINE, STYRENATED PHENOL
Supplementary precautionary statements	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe vapour/ spray. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing should not be allowed out of the workplace. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/ attention. P321 Specific treatment (see medical advice on this label). P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P391 Collect spillage. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NITOCOTE EP405 HARDENER

4-TERT-BUTYLPHENOL **30-60%**

CAS number: 98-54-4 EC number: 202-679-0 REACH registration number: 01-2119489419-21-0000

M factor (Chronic) = 1

Substance of very high concern (SVHC).

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Repr. 2 - H361f
Aquatic Chronic 1 - H410

TRIMETHYLHEXANE-1,6-DIAMINE **10-30%**

CAS number: 25620-58-0 EC number: 247-134-8

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

1,3-BIS(AMINOMETHYL)BENZENE (MXDA) **10-30%**

CAS number: 1477-55-0 REACH registration number: 01-2119480150-50-xxxx

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Corr. 1A - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

STYRENATED PHENOL **5-10%**

CAS number: 61788-44-1 EC number: 262-975-0 REACH registration number: 01-2119979575-18-XXXX

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1A - H317
Aquatic Chronic 2 - H411

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information CAUTION! First aid personnel must be aware of own risk during rescue!

NITOCOTE EP405 HARDENER

Inhalation Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Never give anything by mouth to an unconscious person. Remove affected person from source of contamination. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. 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 damage to mucous membranes in nose, throat, lungs and bronchial system. Delayed, often serious, breathing problems.

Ingestion May cause chemical burns in mouth and throat.

Skin contact Chemical burns. Corrosive to skin. May cause sensitisation by skin contact.

Eye contact Corneal damage.

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 Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx). Containers can burst violently or explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Protective actions during firefighting Control run-off water by containing and keeping it out of sewers and watercourses.

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 protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid inhalation of vapours. Avoid contact with skin and eyes.

6.2. Environmental precautions

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Environmental precautions Avoid or minimise the creation of any environmental contamination. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. DO NOT touch spilled material! Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container. Store at temperatures not exceeding 40°C.

Storage class Corrosive storage.

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

Ingredient comments No exposure limits known for ingredient(s).

STYRENATED PHENOL (CAS: 61788-44-1)

DNEL	Industry - Dermal; Long term systemic effects: 0.4167 mg/kg/day Industry - Inhalation; Long term systemic effects: 0.7347 mg/m³
PNEC	- Fresh water; 0.001371 mg/l - marine water; 0.0001371 mg/l - STP; 1.0638 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate general and local exhaust ventilation.

Eye/face protection The following protection should be worn: Wear tight-fitting, chemical splash goggles or face shield.

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Hand protection	For exposure up to 4 hours, wear gloves made of the following material: Nitrile rubber. For exposure up to 8 hours, wear gloves made of the following material: Butyl rubber. Laminate of polyethylene and ethylene vinyl alcohol (PE/EVOH). It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.
Other skin and body protection	Wear apron or protective clothing in case of contact.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.
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

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellow-Brown
Odour	Amine.
Odour threshold	Not determined.
pH	pH (diluted solution): 12 50% w/w
Melting point	Not determined.
Initial boiling point and range	>200°C @ 1 atm
Flash point	130°C Pensky-Martens closed cup.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.0 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Miscible with water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	400 - 600 mPa s @ at 25°C

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Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

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, no hazardous reactions will occur. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid	Strong acids. Alkalis - organic. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,300.0
Species	Rat
ATE oral (mg/kg)	1,300.7

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	5.36

Skin sensitisation

Skin sensitisation	Sensitising.

Inhalation	Harmful by inhalation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
Ingestion	Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach.
Skin contact	Causes burns. Corrosive to skin. May cause sensitisation by skin contact.
Eye contact	Causes burns.

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Acute and chronic health hazards	p-tertiarybutyl phenol can cause a cosmetic effect known as "occupational vitiligo" or leucoderma. It is believed that repeated contact with this substance can lead to this depigmentation of the skin in sensitive individuals.
Target organs	Skin Eyes Respiratory system, lungs

SECTION 12: Ecological information

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

12.1. Toxicity

Toxicity	May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability	The product is not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	Not expected to be bioaccumulative.
Partition coefficient	Not determined.

12.4. Mobility in soil

Mobility	The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	When handling waste, the safety precautions applying to handling of the product should be considered. Waste is classified as hazardous waste.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Avoid the spillage or runoff entering drains, sewers or watercourses. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.
Waste class	The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	2735
UN No. (IMDG)	2735
UN No. (ICAO)	2735
UN No. (ADN)	2735

14.2. UN proper shipping name

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Proper shipping name (ADR/RID)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-BIS(AMINOMETHYL)BENZENE (MXDA), 4-TERT-BUTYLPHENOL)
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-BIS(AMINOMETHYL)BENZENE (MXDA), 4-TERT-BUTYLPHENOL, STYRENATED PHENOL)
Proper shipping name (ICAO)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-BIS(AMINOMETHYL)BENZENE (MXDA), 4-TERT-BUTYLPHENOL)
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3-BIS(AMINOMETHYL)BENZENE (MXDA), 4-TERT-BUTYLPHENOL)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C7
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels

14.4. Packing group

ADR/RID packing group	I
IMDG packing group	I
ICAO packing group	I
ADN packing group	I

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
ADR transport category	1
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	88
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

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).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Guidance	Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (Sixth edition) L131. Respiratory protective equipment at work (HSG53).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	Only trained personnel should use this material. For professional users only.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	25/10/2019
Revision	5b
Supersedes date	25/05/2017
SDS number	12583
Hazard statements in full	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H361f Suspected of damaging fertility. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.