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 A1754108AE1, A1754109AE1, A1754200AE1, A1754204AE1, A1754220AE1, A1754306AE1, A1754404AE1, A1754405AE1

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

Identified uses Base component of two part epoxy coating.

1.3. Details of the supplier of the safety data sheet

Supplier
Al Gurg Fosroc LLC
PO Box 657
Dubai
United Arab Emirates
+ 971 4 2858606

1.4. Emergency telephone number

Emergency telephone +97142039699 (08:00 to 16:30) // +971506258232 (16:30 to 08:00)GMT+4

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

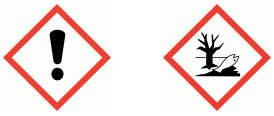
Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H335

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements

P261 Avoid breathing vapour/ spray.
P273 Avoid release to the environment.
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.

Contains

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700), OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

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

SILICA FLOUR **30-60%**

CAS number: 14808-60-7

Classification
Eye Irrit. 2 - H319
STOT SE 3 - H335

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) **30-60%**

CAS number: 25068-38-6 EC number: 500-033-5 REACH registration number: 01-2119456619-26-XXXX

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

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS **5-10%**

CAS number: 68609-97-2 EC number: 271-846-8

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

N-METHYL-2-PYRROLIDONE **<1%**

CAS number: 872-50-4 EC number: 212-828-1

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Repr. 1B - H360D
STOT SE 3 - H335

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ETHYLBENZENE	<1%
CAS number: 100-41-4	EC number: 202-849-4

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H332
STOT RE 2 - H373
Asp. Tox. 1 - H304

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

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

Ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

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

Inhalation Vapours irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

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 or dry powder.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Toxic gases or vapours. Oxides of carbon.

5.3. Advice for firefighters

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 Do not discharge into drains or watercourses or onto the ground.

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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

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid 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.

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

N-METHYL-2-PYRROLIDONE

Long-term exposure limit (8-hour TWA): WEL 10 ppm 40 mg/m³
Short-term exposure limit (15-minute): WEL 20 ppm 80 mg/m³
Sk

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³
Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³
Sk

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

Ingredient comments WEL = Workplace Exposure Limits

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) (CAS: 25068-38-6)

DNEL Workers - Inhalation; Short term systemic effects: 12.25 mg/m³
Workers - Inhalation; Long term systemic effects: 12.25 mg/m³

PNEC - Fresh water; 0.006 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

N-METHYL-2-PYRROLIDONE (CAS: 872-50-4)

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DNEL	Workers - Inhalation; Long term systemic effects: 14.4 mg/m³ Workers - Dermal; Long term systemic effects: 4.8 mg/kg/day

ETHYLBENZENE (CAS: 100-41-4)

DNEL	Workers - Inhalation; Long term systemic effects: 77 mg/m³ Workers - Dermal; Long term systemic effects: 180 mg/kg bw/day
PNEC	- Fresh water; 0.1 mg/l - marine water; 0.01 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.
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: Rubber, neoprene or PVC.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin 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. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	Use an approved air purifying respirator with replaceable filter cartage comply with EN 140and filter EN 141: Organic Vapour cartridge type A1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Various colours.
Odour	Mild.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not determined.
Initial boiling point and range	>200°C
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.

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Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.9 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Immiscible with water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	450-550 P @ 20°C
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 The following materials may react with the product: Amines. Acids. Alkalis.

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 oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition - oxides of carbon. Toxic fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

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Ingestion	May cause discomfort if swallowed.
Skin contact	May cause sensitisation by skin contact. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

Toxicological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
Notes (oral LD_{50})	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	20,000.0
Species	Rabbit
ATE dermal (mg/kg)	20,000.0

Skin corrosion/irritation

Animal data	Rabbit Moderately irritating.

Skin sensitisation

Skin sensitisation	May cause sensitisation by skin contact.

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

ETHYLBENZENE

Carcinogenicity

IARC carcinogenicity	IARC Group 2B Possibly carcinogenic to humans.

SECTION 12: Ecological information

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Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

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

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 3.6 mg/l, Leuciscus idus (Golden orfe) LC_{50}, 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC50, 72 hours: 11 mg/l, Scenedesmus capricornutum (fresh water algae)

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

N-METHYL-2-PYRROLIDONE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 500 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 24 hours: 1000 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability Not expected to be readily biodegradable.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Persistence and degradability	The product is not readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient Not determined.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Partition coefficient	log Pow: 3.242

12.4. Mobility in soil

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Mobility The product is immiscible with water and will sediment in water systems.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Mobility The product has poor water-solubility.

Adsorption/desorption coefficient Water - Koc: 445 @ °C

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.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

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 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. (EPOXY RESIN (Number average MW <= 700))

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

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ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

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	(E)

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

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).
Guidance	Respiratory protective equipment at work (HSG53). Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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General information	Only trained personnel should use this material.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	10/12/2019
Revision	4
Supersedes date	15/11/2017
SDS number	11489
Hazard statements in full	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H360D May damage the unborn child. H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.