



## SAFETY DATA SHEET NITZOZINC PRIMER BASE

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

#### 1.1. Product identifier

**Product name** NITZOZINC PRIMER BASE

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

**Identified uses** Base component of epoxy zincrich primer

#### 1.3. Details of the supplier of the safety data sheet

**Supplier** Fosroc Chemical (India) Pvt. Ltd  
Embassy Point, No 150, 2nd Floor,  
Infantry Road,  
Bangalore - 560001  
+91 80 2355 1500/ 4252 1900  
+91 80 2355 1510

#### 1.4. Emergency telephone number

**Emergency telephone** +91 80 2355 1500/ 4252 1900

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

**Physical hazards** Flam. Liq. 3 - H226  
**Health hazards** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317  
**Environmental hazards** Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

#### 2.2. Label elements

##### Hazard pictograms



**Signal word** Warning

**Hazard statements** H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H410 Very toxic to aquatic life with long lasting effects.

## NITAZINC PRIMER BASE

<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P273 Avoid release to the environment.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Supplementary precautionary statements</b>	<p>P233 Keep container tightly closed.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P391 Collect spillage.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p>

### 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

<b>ZINC</b>	<b>60-100%</b>
CAS number: —	
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b>	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
<b>EPICHLOROHYDRIN, POLYMER W/BISPHENOL A</b>	<b>10-30%</b>
CAS number: 25036-25-3	
EC number: 682-390-8	
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	

## NITAZINC PRIMER BASE

<b>XYLENE</b>		<b>10-30%</b>
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000
<b>Classification</b>		
Flam. Liq. 3 - H226		
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
<b>ISOBUTYL METHYL KETONE</b>		<b>1-5%</b>
CAS number: 108-10-1	EC number: 203-550-1	
<b>Classification</b>		
Flam. Liq. 2 - H225		
Acute Tox. 4 - H332		
Eye Irrit. 2 - H319		
STOT SE 3 - H335		

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

<b>General information</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Inhalation</b>	Move affected person to fresh air at once. 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.
<b>Ingestion</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Give plenty of water to drink. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Skin contact</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Rinse immediately with plenty of 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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	May cause respiratory system irritation.
<b>Ingestion</b>	The product irritates mucous membranes and may cause abdominal discomfort if swallowed.
<b>Skin contact</b>	May cause irritation to skin as well as allergic rash.
<b>Eye contact</b>	May cause severe eye irritation.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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### SECTION 5: Firefighting measures

## NITAZINC PRIMER BASE

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with the following media: Dry chemicals, sand, dolomite etc.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** No specific hazard known.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapours. Cool containers exposed to flames with water until well after the fire is out. 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 the spillage or runoff entering drains, sewers or watercourses.

### 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. 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 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.

**Storage class** Flammable liquid 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

##### ZINC

No occupational exposure limits known.

##### XYLENE

## NITOZINC PRIMER BASE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m<sup>3</sup>

Sk

### ISOBUTYL METHYL KETONE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Sk = Can be absorbed through skin.

**Ingredient comments** WEL = Workplace Exposure Limits

### XYLENE (CAS: 1330-20-7)

#### DNEL

Workers - Inhalation; Long term systemic effects: 77 mg/m<sup>3</sup>

Workers - Inhalation; Short term systemic effects: 289 mg/m<sup>3</sup>

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

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

### Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

### Hand protection

Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

### Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour 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. Gas filter, type A2.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Pale yellow
Odour	Typical
Odour threshold	Not determined.
Vapour pressure	2.3 kPa(water )

## NITAZINC PRIMER BASE

<b>Solubility(ies)</b>	Emulsifiable in water.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

### 9.2. Other information

<b>Other information</b>	No data available.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	The reactivity data for this product will be typical of those for the following class of materials: Epoxides. Strong oxidising agents.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, no hazardous reactions will occur.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Acids. Bases Oxidising materials.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - dermal

<b>ATE dermal (mg/kg)</b>	10,688.37
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#### Acute toxicity - inhalation

<b>ATE inhalation (gases ppm)</b>	43,725.15
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<b>ATE inhalation (vapours mg/l)</b>	75.03
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<b>ATE inhalation (dusts/mists mg/l)</b>	14.58
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<b>Inhalation</b>	May cause respiratory system irritation.
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<b>Ingestion</b>	May cause discomfort.
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<b>Skin contact</b>	May cause serious Skin irritation as well as Allergic rash.
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<b>Eye contact</b>	Irritating to eyes.
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<b>Target organs</b>	Skin Eyes Respiratory system, lungs
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## NITOZINC PRIMER BASE

### Toxicological information on ingredients.

#### 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.

#### ISOBUTYL METHYL KETONE

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,000.0

Species Rat

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 5,000.0

Species Rabbit

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 8.2

Species Rat

ATE inhalation (vapours mg/l) 8.2

### SECTION 12: Ecological information

**Ecotoxicity** The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

#### 12.1. Toxicity

##### Ecological information on ingredients.

#### ZINC

**Toxicity** Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

##### Acute aquatic toxicity

LE(C)<sub>50</sub> 0.1 < L(E)C50 ≤ 1

M factor (Acute) 1

##### Chronic aquatic toxicity

M factor (Chronic) 1

#### XYLENE

**Toxicity** Not considered toxic to fish.

#### 12.2. Persistence and degradability

##### Ecological information on ingredients.

## NITOZINC PRIMER BASE

### XYLENE

#### Persistence and degradability

Expected to be not readily biodegradable.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

#### 12.4. Mobility in soil

**Mobility** Insoluble in water.

#### Ecological information on ingredients.

### XYLENE

#### Mobility

The product is 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.

#### 12.6. Other adverse effects

**Other adverse effects** None known.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

**General information** The generation of waste should be minimised or avoided wherever possible.

**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)** 1993

**UN No. (IMDG)** 1993

**UN No. (ICAO)** 1993

**UN No. (ADN)** 1993

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ZINC)

**Proper shipping name (IMDG)** FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ZINC, ZINC OXIDE)

**Proper shipping name (ICAO)** FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ZINC)

**Proper shipping name (ADN)** FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ZINC)

#### 14.3. Transport hazard class(es)

**ADR/RID class** 3

**ADR/RID classification code** F1

**ADR/RID label** 3

**IMDG class** 3



## NITAZINC PRIMER BASE

ICAO class/division 3

ADN class 3

### 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-E, S-E

ADR transport category 3

Emergency Action Code •3Y

Hazard Identification Number (ADR/RID) 30

Tunnel restriction code (D/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.

Annex II of MARPOL 73/78 and the IBC Code

## SECTION 15: Regulatory information

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

**National regulations** The Manufacture, storage and import of hazardous chemicals rules 1989.

**EU legislation** 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.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

## NITAZINC PRIMER BASE

<b>General information</b>	Only trained personnel should use this material. For professional users only.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	12/03/2020
<b>Revision</b>	4A
<b>Supersedes date</b>	03/05/2016
<b>SDS number</b>	23863
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. 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. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very 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 NITZOZINC PRIMER HARDENER

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

#### 1.1. Product identifier

**Product name** NITZOZINC PRIMER HARDENER

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

**Identified uses** Hardener component of epoxy Zincrich primer

#### 1.3. Details of the supplier of the safety data sheet

**Supplier** Fosroc Chemical (India) Pvt. Ltd  
Embassy Point, No 150, 2nd Floor,  
Infantry Road,  
Bangalore - 560001  
+91 80 2355 1500/ 4252 1900  
+91 80 2355 1510

#### 1.4. Emergency telephone number

**Emergency telephone** +91 80 2355 1500/ 4252 1900

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

**Physical hazards** Flam. Liq. 3 - H226

**Health hazards** Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 1B - H360FD STOT SE 3 - H335, H336

**Environmental hazards** Aquatic Chronic 3 - H412

##### Classification (67/548/EEC or 1999/45/EC)

**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**

**Danger**

## NITZOZINC PRIMER HARDENER

<b>Hazard statements</b>	<p>H226 Flammable liquid and vapour.  H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.  H315 Causes skin irritation.  H318 Causes serious eye damage.  H317 May cause an allergic skin reaction.  H360FD May damage fertility. May damage the unborn child.  H335 May cause respiratory irritation.  H336 May cause drowsiness or dizziness.  H412 Harmful to aquatic life with long lasting effects.</p>
<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P273 Avoid release to the environment.  P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  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.  P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Contains</b>	<p>XYLENE, n-BUTANOL, reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700), 2-ETHOXYETHANOL, TRIETHYLENETETRAMINE, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL</p>
<b>Supplementary precautionary statements</b>	<p>P201 Obtain special instructions before use.  P202 Do not handle until all safety precautions have been read and understood.  P240 Ground and bond container and receiving equipment.  P241 Use explosion-proof electrical equipment.  P242 Use non-sparking tools.  P243 Take action to prevent static discharges.  P261 Avoid breathing vapour/ spray.  P264 Wash contaminated skin thoroughly after handling.  P270 Do not eat, drink or smoke when using this product.  P271 Use only outdoors or in a well-ventilated area.  P272 Contaminated work clothing should not be allowed out of the workplace.  P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.  P302+P352 IF ON SKIN: Wash with plenty of water.  P308+P313 IF exposed or concerned: Get medical advice/ attention.  P310 Immediately call a POISON CENTER/ doctor.  P321 Specific treatment (see medical advice on this label).  P330 Rinse mouth.  P332+P313 If skin irritation occurs: Get medical advice/ attention.  P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.  P362+P364 Take off contaminated clothing and wash it before reuse.  P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.  P403+P233 Store in a well-ventilated place. Keep container tightly closed.  P403+P235 Store in a well-ventilated place. Keep cool.  P405 Store locked up.</p>

### 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

**NITAZINC PRIMER HARDENER**

<b>XYLENE</b> <span style="float: right;"><b>30-60%</b></span>		
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315		
<b>n-BUTANOL</b> <span style="float: right;"><b>10-30%</b></span>		
CAS number: 71-36-3	EC number: 200-751-6	REACH registration number: 01-2119484630-38-0000
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336		
<b>reaction product: bisphenol-A-(epichlorhydrin) epoxy resin</b> <span style="float: right;"><b>10-30%</b></span> <b>(number average molecular weight ≤ 700)</b>		
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01-2119456619-26-XXXX
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411		
<b>2-ETHOXYETHANOL</b> <span style="float: right;"><b>10-30%</b></span>		
CAS number: 110-80-5	EC number: 203-804-1	Substance of very high concern (SVHC).
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Repr. 1B - H360FD		

## NITROZINC PRIMER HARDENER

<b>TRIETHYLENETETRAMINE</b>	<b>1-5%</b>
CAS number: 112-24-3	EC number: 203-950-6

<b>Classification</b>	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

<b>2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL</b>	<b>1-5%</b>
CAS number: 90-72-2	EC number: 202-013-9
	REACH registration number: 01-2119560597-27

<b>Classification</b>	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	

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

<b>General information</b>	Consult a physician for specific advice.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting.
<b>Skin contact</b>	Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes.
<b>Eye contact</b>	Rinse with water. Continue to rinse for at least 15 minutes and get medical attention.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	May cause respiratory irritation.
<b>Ingestion</b>	May be harmful if swallowed and enters airways.
<b>Skin contact</b>	May cause irritation to skin as well as allergic rash.
<b>Eye contact</b>	Eye contact may cause serious and potentially irreversible injuries.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide or dry powder. Larger fires: Water spray.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

## NITIZINC PRIMER HARDENER

### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up.
<b>Hazardous combustion products</b>	Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Oxides of nitrogen. Isocyanate vapours. Hydrogen cyanide (HCN).

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Control run-off water by containing and keeping it out of sewers and watercourses.
<b>Special protective equipment for firefighters</b>	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

<b>Personal precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. In case of spills, beware of slippery floors and surfaces.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Do not 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.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Stop leak if possible without risk. DO NOT touch spilled material! Clean-up personnel should use respiratory and/or liquid contact protection. Provide ventilation and confine spill. Do not allow runoff to sewer. Absorb in vermiculite, dry sand or earth and place into containers. Inform Authorities if large amounts are involved. Do not seal the containers. Keep damp and in the open air for at least seven days.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	For waste disposal, see section 13.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

<b>Usage precautions</b>	Avoid contact with skin and eyes. Avoid inhalation of vapours. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using this product. Contaminated clothing and shoes must be discarded.
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### 7.2. Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Store in tightly-closed, original container in a dry and cool place. Store at temperatures not exceeding °C. Protect from sunlight.
<b>Storage class</b>	Flammable, corrosive, liquid storage

### 7.3. Specific end use(s)

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
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## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

## NITROZINC PRIMER HARDENER

### XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m<sup>3</sup>

Sk

### n-BUTANOL

Long-term exposure limit (8-hour TWA): WEL

Short-term exposure limit (15-minute): WEL 50 ppm 154 mg/m<sup>3</sup>

Sk

### 2-ETHOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 10 ppm(Sk) 37 mg/m<sup>3</sup>(Sk)

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

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Sk = Can be absorbed through skin.

#### XYLENE (CAS: 1330-20-7)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 77 mg/m <sup>3</sup> Workers - Inhalation; Short term systemic effects: 289 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 180 mg/kg/day
<b>PNEC</b>	- Fresh water; 0.327 mg/l - marine water; 0.327 mg/l - STP; 6.58 mg/l

#### n-BUTANOL (CAS: 71-36-3)

<b>DNEL</b>	Workers - ; : 310 mg/m <sup>3</sup>
<b>PNEC</b>	- Fresh water; 0.082 mg/l - marine water; 0.0082 mg/l - Intermittent release; 2.25 mg/l - STP; 2476 mg/l - Sediment (Freshwater); 0.178 mg/kg dw - Sediment (Marinewater); 0.0178 mg/kg dw - Soil; 0.015 mg/kg dw

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

<b>DNEL</b>	Workers - Inhalation; Short term systemic effects: 12.25 mg/m <sup>3</sup> Workers - Inhalation; Long term systemic effects: 12.25 mg/m <sup>3</sup>
<b>PNEC</b>	- Fresh water; 0.006 mg/l

### 8.2. Exposure controls

#### Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.



## NITIZINC PRIMER HARDENER

<b>Personal protection</b>	Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.
<b>Eye/face protection</b>	Wear tight-fitting, chemical splash goggles or face shield. (conform EN 166)
<b>Hand protection</b>	Nitrile gloves are recommended.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of skin contact.
<b>Hygiene measures</b>	Do not eat, drink or smoke when using this product.
<b>Respiratory protection</b>	Gas filter, type A2.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Straw.
<b>Odour</b>	Amine.
<b>Initial boiling point and range</b>	140-180°C
<b>Flash point</b>	~ 57°C Closed cup.
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 1.1 % Upper flammable/explosive limit: 13 %
<b>Vapour pressure</b>	<0.01 Pa @ 20°C
<b>Vapour density</b>	~ 0.99
<b>Solubility(ies)</b>	Insoluble in Water
<b>Auto-ignition temperature</b>	>300°C

#### 9.2. Other information

<b>Other information</b>	Not determined.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	The following materials may react with the product: Amines. Alcohols, glycols. The following materials may react strongly with the product: Alkaline earth metals. Powdered metal.
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#### 10.2. Chemical stability

<b>Stability</b>	Will decompose at temperatures exceeding 200°C.
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#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Containers that can explode when heated.
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#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid contact with strong oxidising agents. Avoid heat.
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#### 10.5. Incompatible materials

<b>Materials to avoid</b>	Alkali metals. Alkaline earth metals.
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#### 10.6. Hazardous decomposition products

## NITOZINC PRIMER HARDENER

**Hazardous decomposition products**      Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

ATE oral (mg/kg)                      1,403.4

##### Acute toxicity - dermal

ATE dermal (mg/kg)                    1,973.09

##### Acute toxicity - inhalation

ATE inhalation (gases ppm)        8,780.49

ATE inhalation (vapours mg/l)    21.46

ATE inhalation (dusts/mists  
mg/l)                                    2.93

<b>Inhalation</b>	May cause respiratory system irritation.
<b>Ingestion</b>	May be harmful if swallowed and enters airways.
<b>Skin contact</b>	May cause serious Skin irritation as well as Allergic rash.
<b>Eye contact</b>	Eye contact may cause serious and potentially irreversible injuries.
<b>Target organs</b>	Eyes, Lungs, Respiratory, Skin.

#### Toxicological information on ingredients.

##### 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.

##### n-BUTANOL

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub>  
mg/kg)                                    790.0

Species                                    Rat

ATE oral (mg/kg)                      790.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub>  
mg/kg)                                    3,400.0

Species                                    Rat

ATE dermal (mg/kg)                    3,400.0

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

**NITIZINC PRIMER HARDENER****Acute toxicity - oral**

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,000.0

Species Rat

Notes (oral LD<sub>50</sub>) NOAEL 750 mg/kg, Oral, Rat

ATE oral (mg/kg) 5,000.0

**Acute toxicity - dermal**

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 20,000.0

Species Rabbit

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> >1600 mg/kg, Dermal, Rat

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.

**TRIETHYLENETETRAMINE****Acute toxicity - oral**

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,500.0

Species Rat

ATE oral (mg/kg) 2,500.0

**Acute toxicity - dermal**

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 550.0

Species Rabbit

ATE dermal (mg/kg) 1,100.0

**2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL****Acute toxicity - oral**

ATE oral (mg/kg) 500.0

**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****Ecological information on ingredients.****XYLENE**

## NITROZINC PRIMER HARDENER

**Toxicity** Not considered toxic to fish.

### n-BUTANOL

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 1375 mg/l, Pimephales promelas (Fat-head Minnow)

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

**Toxicity** Ecotoxic to fish/daphnia/algae

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 3.6 mg/l, Leuciscus idus (Golden orfe)  
LC<sub>50</sub>, 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 1.8 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 11 mg/l, Scenedesmus capricornutum (fresh water algae)

### TRIETHYLENETETRAMINE

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 330 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 31.1 mg/L, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 20 mg/l, Pseudokirchneriella subcapitata

**Acute toxicity - microorganisms** EC<sub>50</sub>, 16 hour: 680 mg/l, Bacteria

### 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 175 mg/l, Cyprinus carpio (Common carp)

## 12.2. Persistence and degradability

**Persistence and degradability** The product is not readily biodegradable.

## Ecological information on ingredients.

### XYLENE

**Persistence and degradability** Expected to be not readily biodegradable.

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

**Bioaccumulative potential** No data available on bioaccumulation.

## NITIZINC PRIMER HARDENER

### Ecological information on ingredients.

#### n-BUTANOL

Partition coefficient : Log pow 0.78

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

Partition coefficient log Pow: 3.242

### 12.4. Mobility in soil

Mobility The product is insoluble in water.

### Ecological information on ingredients.

#### XYLENE

Mobility The product is insoluble in water.

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.

#### TRIETHYLENETETRAMINE

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 The generation of waste should be minimised or avoided wherever possible.

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) 1993

UN No. (IMDG) 1993

## NITROZINC PRIMER HARDENER

UN No. (ICAO) 1993

UN No. (ADN) 1993

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, n-BUTANOL)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, n-BUTANOL)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, n-BUTANOL)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, n-BUTANOL)

### 14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

#### 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

No.

### 14.6. Special precautions for user

EmS F-E, S-E

ADR transport category 3

Emergency Action Code •3Y

Hazard Identification Number (ADR/RID) 30

Tunnel restriction code (D/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.

Annex II of MARPOL 73/78 and the IBC Code

## NITIZINC PRIMER HARDENER

### SECTION 15: Regulatory information

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

<b>National regulations</b>	The Manufacture, storage and import of hazardous chemicals rules 1989.
<b>EU legislation</b>	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).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>General information</b>	For professional use only. Only trained personnel should use this material.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	11/03/2020
<b>Revision</b>	4A
<b>Supersedes date</b>	03/05/2016
<b>SDS number</b>	23864
<b>Hazard statements in full</b>	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. 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. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H360FD May damage fertility. May damage the unborn child. 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.