



## SAFETY DATA SHEET EPOXY PLUS HARDENER

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME EPOXY PLUS HARDENER  
 PRODUCT NO. X0154  
 SUPPLIER ITW DEVCON  
 BAY 150  
 SHANNON INDUSTRIAL ESTATE  
 SHANNON  
 CO CLARE  
 IRELAND  
 T: +353 (0)61471299  
 F: 353(0)61471285  
 EMERGENCY TELEPHONE +44 (0)208 762 8322

### 2 HAZARDS IDENTIFICATION

Causes burns. May cause sensitisation by skin contact. Harmful in contact with skin and if swallowed. Possible risk of impaired fertility. Possible risk of harm to the unborn child. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 CLASSIFICATION Xn;R21/22. Rep 3;R62, R63. C;R34. R43. N;R51/53.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	202-013-9	90-72-2	1-10%	Xn;R22 Xi;R36/38
2-PIPERAZIN-1-YLETHYLAMINE	205-411-0	140-31-8	10-30%	C;R34 Xn;R21/22 R43 R52/53
NONYLPHENOL	246-672-0	25154-52-3	10-30%	Repr. Cat. 3;R62,R63 C;R34 Xn;R22 N;R50/53
POLYAMINOAMIDE		68410-23-1	1-5%	Xi;R38,R41. N;R50/53. R43.

The Full Text for all R-Phrases are Displayed in Section 16

### 4 FIRST-AID MEASURES

#### GENERAL INFORMATION

Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

#### INHALATION

Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

#### INGESTION

Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Drink a few glasses of water or milk. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention.

#### SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Contact physician if irritation persists.

#### EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Contact physician if irritation persists.

### 5 FIRE-FIGHTING MEASURES

## EPOXY PLUS HARDENER

### EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide or dry powder.

### SPECIAL FIRE FIGHTING PROCEDURES

Keep up-wind to avoid fumes. Avoid water in straight hose stream; will scatter and spread fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

### SPECIFIC HAZARDS

Avoid breathing fire vapours.

### PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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## 6 ACCIDENTAL RELEASE MEASURES

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### PERSONAL PRECAUTIONS

Warn everybody of potential hazards and evacuate if necessary. Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use naked flames or other sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

### ENVIRONMENTAL PRECAUTIONS

Do not allow ANY environmental contamination. Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

### SPILL CLEAN UP METHODS

Absorb spillage with non-combustible, absorbent material. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

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## 7 HANDLING AND STORAGE

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### USAGE PRECAUTIONS

Use only in well-ventilated areas. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices.

### STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place.

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## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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### PROTECTIVE EQUIPMENT



### PROCESS CONDITIONS

Provide eyewash, quick drench.

### ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

### RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

### HAND PROTECTION

Use suitable protective gloves if risk of skin contact.

### EYE PROTECTION

Wear approved, tight fitting safety glasses where splashing is probable.

### HYGIENE MEASURES

Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product.

### SKIN PROTECTION

Protection suit must be worn.

**EPOXY PLUS HARDENER****9 PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Viscous liquid		
COLOUR	White		
ODOUR	Mild Phenolic.		
SOLUBILITY	Slightly soluble in water.		
BOILING POINT (°C)	N/D	MELTING POINT (°C)	N/D
RELATIVE DENSITY	1.0 20 °C	VAPOUR DENSITY (air=1)	>1
VAPOUR PRESSURE	<1 25	pH-VALUE, CONC. SOLUTION	10.5 @ 20 °C
FLASH POINT (°C)	>110		

**10 STABILITY AND REACTIVITY****STABILITY**

Stable under normal temperature conditions and recommended use.

**CONDITIONS TO AVOID**

Avoid heat, flames and other sources of ignition.

**MATERIALS TO AVOID**

Avoid contact with oxidising agents. Nitrous acid and other nitrosating agents.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Fire or high temperatures create: Nitrous gases (NOx). Oxides of: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.

**11 TOXICOLOGICAL INFORMATION**

TOXIC DOSE 1 - LD 50                      2140 mg/kg (oral rat)

**INGESTION**

Harmful if swallowed.

**SKIN CONTACT**

Causes burns. May cause sensitisation by skin contact. Harmful in contact with skin.

**HEALTH WARNINGS**

This substance is corrosive. This chemical may cause skin/eye irritation and burns (corrosive).

**12 ECOLOGICAL INFORMATION****ECOTOXICITY**

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

**MOBILITY**

Do not discharge into drains, water courses or onto the ground.

**WATER HAZARD CLASSIFICATION**

WGK 3

**13 DISPOSAL CONSIDERATIONS****DISPOSAL METHODS**

Dispose of waste and residues in accordance with local authority requirements.

**WASTE CLASS**

08 04 99

**14 TRANSPORT INFORMATION**

## EPOXY PLUS HARDENER



UK ROAD CLASS	8		
PROPER SHIPPING NAME	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2-PIPERAZIN-1-YLETHYLAMINE, NONYLPHENOL)		
UN NO. ROAD	3267	UK ROAD PACK GR.	III
ADR CLASS NO.	8	ADR CLASS	Class 8: Corrosive substances.
ADR PACK GROUP	III	HAZARD No. (ADR)	80
ADR LABEL NO.	8	HAZCHEM CODE	2X
CEFIC TEC(R) NO.	80GC7-II+III	RID CLASS NO.	8
RID PACK GROUP	III	UN NO. SEA	3267
IMDG CLASS	8	IMDG PAGE NO.	8
IMDG PACK GR.	III	EMS	F-A, S-B
MFAG	See Guide	MARINE POLLUTANT	No.
UN NO. AIR	3267	AIR CLASS	8
AIR PACK GR.	III		

### 15 REGULATORY INFORMATION

#### LABELLING



Corrosive



Harmful



Dangerous for the environment

#### CONTAINS

2-PIPERAZIN-1-YLETHYLAMINE  
 NONYLPHENOL  
 POLYAMINOAMIDE

#### RISK PHRASES

R34	Causes burns.
R43	May cause sensitisation by skin contact.
R21/22	Harmful in contact with skin and if swallowed.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### SAFETY PHRASES

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

### 16 OTHER INFORMATION

REVISION DATE 07/10/2008

## EPOXY PLUS HARDENER

REV. NO./REPL. SDS GENERATED 7

### RISK PHRASES IN FULL

R21/22	Harmful in contact with skin and if swallowed.
R22	Harmful if swallowed.
R34	Causes burns.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.

### DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



## SAFETY DATA SHEET EPOXY PLUS RESIN

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME                    EPOXY PLUS RESIN  
 PRODUCT NO.                    X0152  
 SUPPLIER                        ITW DEVCON  
                                       BAY 150  
                                       SHANNON INDUSTRIAL ESTATE  
                                       SHANNON  
                                       CO CLARE  
                                       IRELAND  
                                       T: +353 (0)61471299  
                                       F: 353(0)61471285  
 EMERGENCY TELEPHONE        +44 (0)208 762 8322

### 2 HAZARDS IDENTIFICATION

May cause sensitisation by skin contact. Irritating to eyes and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION                    Xi;R36/38. R43. N;R51/53.

#### HUMAN HEALTH

Preparation contains an epoxy resin, which may cause sensitisation and development of allergy.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
EPOXY RESIN (Number average MW <= 700 )	500-033-5	25068-38-6	30-60%	R43 Xi;R36/38 N;R51/53

The Full Text for all R-Phrases are Displayed in Section 16

### 4 FIRST-AID MEASURES

#### GENERAL INFORMATION

Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

#### INHALATION

Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Contact physician if discomfort continues.

#### INGESTION

Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Drink a few glasses of water or milk. Get medical attention.

#### SKIN CONTACT

Remove affected person from source of contamination. Wash skin thoroughly with soap and water for several minutes. Contact physician if irritation persists.

#### EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Contact physician if irritation persists.

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide or dry powder.

## EPOXY PLUS RESIN

### SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Keep up-wind to avoid fumes. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.

### SPECIFIC HAZARDS

By heating and fire, irritating vapours/gases may be formed.

### PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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## 6 ACCIDENTAL RELEASE MEASURES

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### PERSONAL PRECAUTIONS

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

### ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

### SPILL CLEAN UP METHODS

Absorb with sand or other inert absorbent. Transfer to covered steel drums for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

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## 7 HANDLING AND STORAGE

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### USAGE PRECAUTIONS

Use only in well-ventilated areas. Keep away from heat, sparks and open flame. Open drum carefully as content may be under pressure. Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices.

### STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place.

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## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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### PROTECTIVE EQUIPMENT



### PROCESS CONDITIONS

Provide eyewash, quick drench.

### ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

### RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

### HAND PROTECTION

Use protective gloves made of: Rubber or plastic. Butyl rubber gloves are recommended.

### EYE PROTECTION

Wear approved chemical safety goggles where eye exposure is reasonably probable.

### HYGIENE MEASURES

Keep away from food, drink and animal feeding stuffs. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving work place.

### SKIN PROTECTION

Protection suit must be worn.

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

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## EPOXY PLUS RESIN

APPEARANCE	Viscous liquid		
COLOUR	Grey		
ODOUR	Slight odour		
SOLUBILITY	Slightly soluble in water.		
BOILING POINT (°C)	>260	MELTING POINT (°C)	N/D
RELATIVE DENSITY	1.39 25 °C	VAPOUR DENSITY (air=1)	>1
VAPOUR PRESSURE	0.03 mmHg 77.2	EVAPORATION RATE	<<1 (butyl acetate =1)
pH-VALUE, CONC. SOLUTION	7 @ 20 °C	FLASH POINT (°C)	>204.4
FLAMMABILITY LIMIT - LOWER(%)	N/D	FLAMMABILITY LIMIT - UPPER(%)	N/D

### 10 STABILITY AND REACTIVITY

#### STABILITY

Stable under normal temperature conditions and recommended use.

#### CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

#### HAZARDOUS POLYMERISATION

Will not polymerise.

#### MATERIALS TO AVOID

Avoid contact with: Strong oxidising agents. Strong acids. Amines.

#### HAZARDOUS DECOMPOSITION PRODUCTS

None under normal conditions.

### 11 TOXICOLOGICAL INFORMATION

#### SKIN CONTACT

Irritating to skin. May cause sensitisation by skin contact.

#### EYE CONTACT

Irritating to eyes.

#### HEALTH WARNINGS

Preparation contains an epoxy resin, which may cause sensitisation and development of allergy.

### 12 ECOLOGICAL INFORMATION

#### ECOTOXICITY

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

#### MOBILITY

Do not discharge into drains, water courses or onto the ground.

#### WATER HAZARD CLASSIFICATION

WGK 2

### 13 DISPOSAL CONSIDERATIONS

#### DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

#### WASTE CLASS

08 04 99

### 14 TRANSPORT INFORMATION



## EPOXY PLUS RESIN



UK ROAD CLASS	9		
PROPER SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))		
UN NO. ROAD	3082	UK ROAD PACK GR.	III
ADR CLASS NO.	9	ADR CLASS	Class 9: Miscellaneous dangerous substances and articles.
ADR PACK GROUP	III	HAZARD No. (ADR)	90
ADR LABEL NO.	9	HAZCHEM CODE	2X
CEFIC TEC(R) NO.	90GM6-III	RID CLASS NO.	9
RID PACK GROUP	III	UN NO. SEA	3082
IMDG CLASS	9	IMDG PAGE NO.	9
IMDG PACK GR.	III	EMS	F-A, S-F
MFAG	See Guide	MARINE POLLUTANT	No.
UN NO. AIR	3082	AIR CLASS	9
AIR PACK GR.	III		

### 15 REGULATORY INFORMATION

#### LABELLING



Irritant



Dangerous for the environment

CONTAINS EPOXY RESIN (Number average MW <= 700 )

#### RISK PHRASES

R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R43	May cause sensitisation by skin contact.
R36/38	Irritating to eyes and skin.

#### SAFETY PHRASES

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39	Wear suitable gloves and eye/face protection.
P5	Contains epoxy constituents. See information supplied by the manufacturer.

### 16 OTHER INFORMATION

REVISION DATE 07/10/2008  
 REV. NO./REPL. SDS GENERATED 5  
 DATE 18.01.2005

#### RISK PHRASES IN FULL

R36/38 Irritating to eyes and skin.  
 R43 May cause sensitisation by skin contact.  
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## EPOXY PLUS RESIN

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