



SAFETY DATA SHEET EPOXY PLUS RESIN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name EPOXY PLUS RESIN
Product No. X0152

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

Identified uses Resin.

1.3. Details of the supplier of the safety data sheet

Supplier ITW DEVCON
BAY 150
SHANNON INDUSTRIAL ESTATE
SHANNON
CO CLARE
IRELAND
T: +353 (0)61471299
F: 353(0)61471285
info@itwippe.eu

1.4. Emergency telephone number

+44 (0) 1235 239670

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36/38. R43. N;R51/53.

Human health

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

2.2. Label elements

Labelling



Irritant



Dangerous for the
environment

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.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

EPOXY PLUS RESIN

3.2. Mixtures

EPOXY RESIN (Number average MW <= 700)		30-60%
CAS-No.: 25068-38-6	EC No.: 500-033-5	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Skin Irrit. 2 - H315	R43	
Eye Irrit. 2 - H319	Xi;R36/38	
Skin Sens. 1 - H317	N;R51/53	
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

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.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Specific hazards

When heated and in case of fire, irritating vapours/gases may be formed.

5.3. Advice for firefighters

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.

Protective equipment for fire-fighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

EPOXY PLUS RESIN

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.

6.3. Methods and material for containment and cleaning up

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.

6.4. Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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 chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. 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 noted for ingredient(s).

8.2. Exposure controls

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Grey.
Odour	Slight odour.
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	>260
Melting point (°C)	N/D
Relative density	1.39 25 °C

EPOXY PLUS RESIN

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

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Strong oxidising agents. Acids. Amines.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

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

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

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.

Name	EPOXY RESIN (Number average MW <= 700)
Toxic Dose 1 - LD 50	>2000 mg/kg (oral rat)
Toxic Dose 2 - LD 50	>2000 mg/kg (oral rat)

SECTION 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.

12.1. Toxicity

Acute Fish Toxicity

Very toxic to aquatic organisms.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

EPOXY PLUS RESIN

12.4. Mobility in soil

Mobility:

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

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

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

Waste Class

08 04 99

SECTION 14: TRANSPORT INFORMATION

General

No other information noted.

14.1. UN number

UN No. (ADR/RID/ADN) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

ADR/RID/ADN Class 9

ADR/RID/ADN Class Class 9: Miscellaneous dangerous substances and articles.

ADR Label No. 9

IMDG Class 9

ICAO Class/Division 9

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group III

IMDG Packing group III

ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



EPOXY PLUS RESIN

14.6. Special precautions for user

EMS	F-A, S-F
Emergency Action Code	•3Z
Hazard No. (ADR)	90
Tunnel Restriction Code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION

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

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Water hazard classification

WGK 2

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	12/08/2011
Revision	8
Supersedes date	03/05/2011
Date	25/07/2011
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.
Hazard Statements In Full	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

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 HARDENER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name EPOXY PLUS HARDENER
Product No. X0154

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

Identified uses Hardener.

1.3. Details of the supplier of the safety data sheet

Supplier ITW DEVCON
BAY 150
SHANNON INDUSTRIAL ESTATE
SHANNON
CO CLARE
IRELAND
T: +353 (0)61471299
F: 353(0)61471285
info@itwippe.eu

1.4. Emergency telephone number

+44 (0) 1235 239670

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R21/22. Repr. Cat. 3;R62, R63. C;R34. R43. N;R51/53.

2.2. Label elements

Contains 2-PIPERAZIN-1-YLETHYLAMINE
NONYLPHENOL
POLYAMINOAMIDE

Labelling



Corrosive



Dangerous for the
environment

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.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

EPOXY PLUS HARDENER

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL		1-10%
CAS-No.: 90-72-2	EC No.: 202-013-9	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xn;R22 Xi;R36/38	
2-PIPERAZIN-1-YLETHYLAMINE		10-30%
CAS-No.: 140-31-8	EC No.: 205-411-0	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	Classification (67/548/EEC) C;R34 Xn;R21/22 R43 R52/53	
NONYLPHENOL		10-30%
CAS-No.: 25154-52-3	EC No.: 246-672-0	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Corr. 1B - H314 Repr. 2 - H361fd Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) Repr. Cat. 3;R62,R63 C;R34 Xn;R22 N;R50/53	
POLYAMINOAMIDE		1-5%
CAS-No.: 68410-23-1	EC No.:	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xi;R38,R41. N;R50/53. R43.	

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

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.

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

EPOXY PLUS HARDENER

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Specific hazards

Avoid breathing fire vapours.

5.3. Advice for firefighters

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.

Protective equipment for fire-fighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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 open fire or other sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. 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.

6.3. Methods and material for containment and cleaning up

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.

6.4. Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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 chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. 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 noted for ingredient(s).

8.2. Exposure controls

Protective equipment

EPOXY PLUS HARDENER



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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	White.
Odour	Mild. Phenolic.
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	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

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Strong oxidising agents.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not available.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

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

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

EPOXY PLUS HARDENER

11.1. Information on toxicological effects

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).

Name	2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL
Toxic Dose 1 - LD 50	1670 mg/kg (oral rat)
Toxic Conc. - LC 50	>0.5 ppm/-- (ihl-rat)

SECTION 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.

12.1. Toxicity

Acute Fish Toxicity

Very toxic to aquatic organisms.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

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

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

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

Waste Class

08 04 99

SECTION 14: TRANSPORT INFORMATION

General

No other information noted.

14.1. UN number

UN No. (ADR/RID/ADN) 3267

UN No. (IMDG) 3267

UN No. (ICAO) 3267

14.2. UN proper shipping name

Proper Shipping Name CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2-PIPERAZIN-1-YLETHYLAMINE, NONYLPHENOL)

14.3. Transport hazard class(es)

EPOXY PLUS HARDENER

ADR/RID/ADN Class	8
ADR/RID/ADN Class	Class 8: Corrosive substances.
ADR Label No.	8
IMDG Class	8
ICAO Class/Division	8
Transport Labels	



14.4. Packing group

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

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

EMS	F-A, S-B
Emergency Action Code	2X
Hazard No. (ADR)	80

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION

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

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Water hazard classification

WGK 3

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	05/08/2011
Revision	8
Supersedes date	07/10/2008
Date	25/07/2011

EPOXY PLUS HARDENER

Risk Phrases In Full

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

Hazard Statements In Full

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.
H319	Causes serious eye irritation.
H361fd	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.