

Product Bio-Tec 2 pack catalysed epoxy
Revision Date 16/03/15
Revision 1



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

1.1. Product identifier

Product name Bio-Tec 2 pack catalysed epoxy

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

Identified uses Paint or paint related material.
Uses advised against No uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier FSW Coatings Ltd
Virginia
Co Cavan
Ireland
www.fleetwood.ie
Tel: + 353 49854 7209
Fax: +353 49854 7470
Email: info@fsw.ie
Contact Person SDS Contact: DCM Compliance, info@dcmcompliance.com

1.4. Emergency telephone number

Emergency Contact Number + 353 49854 7209 (Between 0900 and 1700 hrs Monday-Friday)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1 Classification (EC 1272/2008)

Physical and Chemical Hazards Not classified.
Human Health Not classified.
Environment Not classified.

2.1.2 Classification (1999/45/EEC)

Not classified.

2.2. Label elements

2.2.1 Label in Accordance With (EC) No. 1272/2008

Pictogram(s) No pictogram required.
Signal Word No Signal word required
Hazard Statements None required
Precautionary Statements None required
Supplementary Precautionary Statements None required

2.3. Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

This product is a preparation.

3.2. Mixtures

Product name	Product identifier	REACH Registration	%	Classification (1999/45/EEC)	Classification (EC 1272/2008)
2-(2-BUTOXYETHOXY)ETHANOL	CAS: 112-34-5 EC: 203-961-6	01-2119475104-44	< 1%	Xi;R36	Eye Irrit. 2 - H319
2-(2-BUTOXYETHOXY)ETHANOL	CAS: 112-34-5 EC: 203-961-6	01-2119475104-44	1-10%	Xi;R36	Eye Irrit. 2 - H319
AMMONIA	CAS: 1336-21-6 EC: 215-647-6	02-2119752451-43-0000	...% 1-10%	C;R34 N;R50	Skin Corr. 1B - H314 STOT SE 3 - H335 Aquatic Acute 1 - H400
MONOPROPYLENE GLYCOL	CAS: EC:		1-10%	Xi;R36.	Not classified.
propane-1,2-diol	CAS: 57-55-6 EC: 200-338-0	02-2119752808-26-0000	< 1%	Not classified.	Not classified.
Sodium Nitrite	CAS: 7632-00-0 EC: 231-555-9		< 1%	O;R8 T;R25 N;R50	Ox. Sol. 3 - H272 Acute Tox. 3 - H301 Aquatic Acute 1 - H400
TITANIUM DIOXIDE	CAS: 13463-67-7 EC: 236-675-5	01-2119489379-17-0002	10-20%	Not classified.	Not classified.

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	General first aid, rest, warmth and fresh air. Get medical attention.
Inhalation	Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation	Inhalation of mist or vapor may cause respiratory tract irritation
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Prolonged contact may cause redness and/or tearing.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing Media	This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Use: Water spray, foam, dry powder or carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	When heated, vapours/gases hazardous to health may be formed.
Unusual Fire & Explosion Hazards	No unusual fire or explosion hazards noted.
Specific hazards	In case of fire, toxic gases may be formed (COx, NOx).

5.3. Advice for firefighters

Special Fire Fighting Procedures	If possible, fight fire from protected position. Keep up-wind to avoid fumes. Avoid breathing fire vapours. Ventilate closed spaces before entering them. Containers close to fire should be removed or cooled with water.
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

Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use open fire or other sources of ignition. Make safe all sources of ignition. Avoid contact with skin and eyes.

6.2. Environmental precautions

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

Stop leak if possible without risk. Wear necessary protective equipment. Absorb spillage with non-combustible, absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

For waste disposal, see section 13. See section 11 for additional information on health hazards.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Do not handle broken packages without protective equipment. Avoid spilling, skin and eye contact. Do not use contact lenses. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Ensure adequate ventilation. Vapours are heavier than air and may spread along floors. Do not eat, drink or smoke when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep upright. Keep locked up and out of reach of

children. Avoid storing for very long periods. Keep container tightly sealed when not in use. Bags or containers, which are opened, must be carefully resealed to prevent leakage. Avoid contact with oxidising agents. Store away from acids. Store separate from alkalis. Store in cool dry areas away from direct sunlight or sources of ignition. Store away from other chemicals.

7.3. Specific end use(s)

Usage Description

Use only according to directions. Replace and tighten cap after use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA 8 Hrs		STEL 15 Min		Notes
2-(2-BUTOXYETHOXY)ETHANOL	OEL	10	67.5	15	101.2	IOELV
2-(2-BUTOXYETHOXY)ETHANOL	OEL	10	67.5	15	101.2	IOELV
propane-1,2-diol	OEL	150	470	-	-	-
TITANIUM DIOXIDE	OEL	-	10	-	-	-

Ingredient Comments

OEL = Occupational Exposure Limit.
Ireland, Occupational Exposure Limits 2011

8.2. Exposure controls

8.2.1 Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

8.2.2 Respiratory Equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

8.2.3 Protective equipment



Eye protection

If risk of splashing, wear safety goggles or face shield. Tightly fitting safety glasses (EN 166).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The selection of the suitable gloves does not only depend on the material, but also on

further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber
Break through time: 480 min
Glove thickness: > 0,33 mm
Chloroprene
Break through time: 480 min
Glove thickness: > 0,6 mm

Other protection

No Information available.

8.2.4 Hygiene measures

Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Take off immediately all contaminated clothing. Avoid contact with skin, eyes and clothing.

8.2.5 Environmental Exposure Controls

Keep container tightly sealed when not in use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Viscous Liquid
b) Colour	WHITE
c) Odour	Slight
d) pH-Value, Conc. Solution	>8.5
e) Melting point (°C)	No information available
f) Initial boiling point and boiling range (°C)	No information available
g) Flash point (°C)	No information available
h) Evaporation rate	No information available
i) Evaporation Factor	No information available
j) Flammability Limit - Lower(%)	No information available
k) Flammability Limit - Upper(%)	No information available
l) Vapour pressure	No information available
m) Vapour density (air=1)	No information available
n) Relative density	1.2
o) Bulk Density	No information available
p) Solubility	No information available
q) Decomposition temperature (°C)	No information available
s) Partition coefficient; n-octanol/water	No information available
t) Auto Ignition Temperature (°C)	No information available
u) Viscosity	>250.3 mm(ISO 2431)
v) Explosive properties	No information available
w) Oxidising properties	No information available

9.2. Other information

No information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reaction with: Acids. Strong oxidising agents.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Reaction with: See section 10.1 for information on hazardous reactions.

Hazardous Polymerisation Unknown.

10.4. Conditions to avoid

Protect from frost. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid Strong acids. Strong oxidising substances. Do not mix with other chemicals unless listed on directions.

10.6. Hazardous decomposition products

Thermal decomposition may release acrid fumes, smoke and carbon monoxide. In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

11.1.1 Toxicological Information

No information available.

Toxicological Information on ingredients

Name	Identifier	Acute Toxicity (Oral LD50)	Acute Toxicity (Dermal LD50)	Acute Toxicity (Inhalation LC50)
2-(2-BUTOXYETHOXY)ETHANOL	CAS: 112-34-5	2410 mg/kg Mouse	2764 mg/kg Rabbit	
2-(2-BUTOXYETHOXY)ETHANOL	CAS: 112-34-5	2410 mg/kg Mouse	2764 mg/kg Rabbit	
AMMONIA	CAS: 1336-21-6	350 mg/kg (oral rat)		
propane-1,2-diol	CAS: 57-55-6	> 22000 mg/kg Rat	> 20000 mg/kg Rabbit	317 mg/l (vapours) Rabbit
TITANIUM DIOXIDE	CAS: 13463-67-7	> 5000 mg/kg Rat		6.82 mg/l (vapours) 4 hours

11.1.2 Acute toxicity:

Acute Toxicity (Oral LD50)	No information available.
Acute Toxicity (Dermal LD50)	No information available.
Acute Toxicity (Inhalation LC50)	No information available.

11.1.3 Skin Corrosion/Irritation:

No information available.

11.1.4 Serious eye damage/irritation:

No information available.

11.1.5 Respiratory or skin sensitisation:

Respiratory sensitisation	No information available.
Skin sensitisation	No information available.

11.1.6 Germ cell mutagenicity:

Genotoxicity - In Vitro	No information available.
Genotoxicity - In Vivo	No information available.

11.1.7 Carcinogenicity:

Carcinogenicity	No information available.
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11.1.8 Specific target organ toxicity - single exposure:

STOT - Single exposure	No information available.
STOT - Repeated exposure	No information available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

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

12.2. Toxicity

No ecological toxicity available on the overall finished product.

Ecological Information on ingredients

Name	Identifier	Acute Toxicity – Aquatic Invertebrates	Acute Toxicity – Aquatic Plants	Acute Toxicity – Fish
2-(2-BUTOXYETHOXY)ETHANOL	CAS: 112-34-5	EC50 48 hours > 100 mg/l Daphnia magna		LC0 48 hours > 1000 mg/l Leuciscus idus (Golden orfe)

2-(2-BUTOXYETHOXY)ETHANOL	CAS: 112-34-5	EC50 48 hours > 100 mg/l Daphnia magna	LC0 48 hours > 1000 mg/l Leuciscus idus (Golden orfe)
propane-1,2-diol	CAS: 57-55-6		LC50 96 hours 40613 mg/l

12.3. Persistence and degradability

Degradability The degradability of the product has not been stated.

12.4 Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.5. Mobility in soil

Mobility: No information available.

12.6. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.7. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product. The generation of waste should be avoided or minimised wherever possible. Avoid pouring into drains or waterways. Avoid contaminating the ground or water with waste. Where practical, waste or surplus material should be recovered and recycled.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. If recycling or reuse is not practicable then the packaging material must be disposed of in accordance with local state and national regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) Not applicable.

UN No. (IMDG) Not applicable.

UN No. (ICAO) Not applicable.

14.2. UN proper shipping name

Proper Shipping Name Not applicable.

14.3. Transport hazard class(es)

ADR/RID/ADN	Not applicable.
ADR/RID/ADN Class	Not applicable.
ADR Label No.	Not applicable.
IMDG Class	Not applicable.
ICAO Class/Division	Not applicable.
Transport Labels	None Required

14.4. Packing group

ADR/RID/ADN Packing group	Not applicable.
IMDG Packing group	Not applicable.
ICAO Packing group	Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant	Not applicable.
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14.6. Special precautions for user

EMS	Not applicable.
Emergency Action Code	Not applicable.
Hazard No. (ADR)	Not applicable.
Tunnel Restriction Code	Not applicable.

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

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15.1.1 EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. 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. Reach Regulation (EC) No 453/2010.

15.1.2 Approved Code of Practice

2011 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Indication of Changes	This is first issue.
Revision Date	16/03/15
Revision	1
Risk Phrases in Full	R34 Causes burns. R36 Irritating to eyes. R37 Irritating to respiratory system. R25 Toxic if swallowed.
Hazard Statements In Full	H272 May intensify fire; oxidizer H301 Toxic if swallowed H314 Causes severe skin burns and eye damage H319 Causes serious eye irritation H335 May cause respiratory irritation H400 Very toxic to aquatic life
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.