MATERIAL: TECHSIL EP25676 GREY RESIN

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

1.1 Product Name: **Techsil EP25676 Grey Resin**

1.2 Product Use:

1.3 Supplier:

Techsil Ltd
34 Bidavon Industrial Estate
Waterloo Road
Bidford on Avon
Warwickshire
B50 4JN
Tel: +44(0)1789 773232
Fax: +44(0)1789 774239
Email: sales@techsil.co.uk

1.4 Emergency Telephone: **+44(0)7970025933**

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

Classification under CLP: Eye Dam. 1: H318; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Irrit. 2: H315; Skin Sens. 1: H317

Most important adverse effects: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2 Label Elements:

Label elements:

Hazard statements: H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion
GHS07: Exclamation mark
GHS09: Environmental

Precautionary statements: P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection.
P273: Avoid release to the environment.
P314: Get medical advice/attention if you feel unwell.
P302+352: IF ON SKIN: Wash with plenty of water/.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other Hazards:

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

3.2 Mixtures:

Hazardous ingredients:

ZINC OXIDE

EINECS	CAS	PBT/WEL	CLP Classification	Percent
-	1314-13-2	-	Aquatic Chronic 1: H410; Aquatic Acute 1: H400	30 – 50%

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}

500-033-5	25068-38-6	-	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317; Aquatic Chronic 2: H411	1 – 10%

1,4-BIS(2,3-EPOXYPROPOXY) BUTANE

219-371-7	2425-79-8	-	Acute Tox. 4: H332; Acute Tox. 4: H312; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317	1 – 10%

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

220-666-8	2855-13-2	-	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412	1 – 10%

EPOXY COPOLYMER

-	9072	-	-	1 – 10%

BISPHENOL A F EPOXY RESIN

-	28064-14-4	-	-	1 – 10%

N-METHYL-2-PYRROLIDONE

212-828-1	872-50-4	-	Repr. 1B: H360D; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315	<1%

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.
Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.
Ingestion: Wash out mouth with water. Consult a doctor.
Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2 Most Important Symptoms and Effects, both Acute and Delayed:

Skin contact: There may be irritation and redness at the site of contact.
Eye contact: There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.
Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed:

Immediate / special treatment: Eye bathing equipment should be available on the premises.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media:

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2 Special Hazards Arising from the Substance or Mixture:

Exposure hazards: In combustion emits toxic fumes.

5.3 Advice for Firefighters:

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental Precautions:

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and Material for Containment and Cleaning-Up:

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to Other Sections:

Reference to other sections: Refer to section 8 of SDS.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2 Conditions for Safe Storage, Including and Incompatibilities:

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

7.3 Specific End Use(s):

Specific end use(s): No data available.

SECTION 8: HANDLING AND STORAGE

8.1 Control Parameters:

Hazardous ingredients:

ZINC OXIDE

Workplace exposure limits:			**Respirable dust**	
State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	5 mg/m3	10 mg/m3	-	-

N-METHYL-2-PYRROLIDONE

UK	40 mg/m3	80 mg/m3	-	-

DNEL / PNEC No data available.

8.2 Exposure Controls:

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.
Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.
Hand protection: Protective gloves.
Eye protection: Safety glasses. Ensure eye bath is to hand.
Skin protection: Protective clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

State: Liquid
Colour: Grey
Odour: Characteristic odour
Oxidising: Non-oxidising (by EC criteria)
Solubility in water: Slightly soluble
Viscosity: Viscous
Boiling point/range°C: >160
Flash point°C: >160
Relative density: 2.10

9.2 Other Information:

Other information: No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Reactivity: Stable under recommended transport or storage conditions.

10.2 Chemical Stability:

Chemical stability: Stable under normal conditions.

10.3 Possibility of Hazardous Reactions:

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to Avoid:

Conditions to avoid: Heat.

10.5 Incompatible Materials:

Materials to avoid: Strong oxidising agents. Strong acids.

10.6 Hazardous Decomposition Products:

Haz. decomp. products: In combustion emits toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Hazardous ingredients:

ZINC OXIDE

IPR	RAT	LD50	240	mg/kg
ORL	MUS	LD50	7950	mg/kg

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}

ORL	MUS	LD50	15600	mg/kg
ORL	RAT	LD50	11400	mg/kg
SKN	RBT	LD50	>20	ml/kg

1,4-BIS(2,3-EPOXYPROPOXY) BUTANE

ORL	MUS	LD50	1100	µg/kg
ORL	RAT	LD50	1134	mg/kg

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

ORAL	RAT	LD50	1030	mg/kg

EPOXY COPOLYMER

ORAL	RAT	LD50	>2000	mg/kg

BISPHENOL A F EPOXY RESIN

ORAL	RAT	LD50	>2000	mg/kg

N-METHYL-2-PYRROLIDONE

ORL	MUS	LD50	5130	mg/kg
ORL	RAT	LD50	7	gm/kg
SCU	RAT	LD50	>2	gm/kg

Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated

Symptoms / routes of exposure:

Skin contact: There may be irritation and redness at the site of contact.
Eye contact: There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.
Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Hazardous ingredients:
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Daphnia magna	48H EC50	17.4	mg/l

EPOXY COPOLYMER

Daphnia magna	48H EC50	90	mg/l

12.2 Persistence and Degradability:

Persistence and degradability: Not biodegradable.

12.3 Bioaccumulative Potential:

Bioaccumulative potential: Bioaccumulation potential.

12.4 Mobility in Soil:

Mobility: Readily absorbed into soil.

12.5 Results of PBT and vPvB Assessment:

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6 Other Adverse Effects:

Other adverse effects: Toxic to aquatic organisms. Toxic to soil organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Waste code number: 08-04-09

Disposal of packaging: Unreacted material should be disposed of as hazardous waste. Reacted material on tins, spatulas, mixing bowls, application brushes etc. once fully reacted can be disposed of as non-hazardous waste.
NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number:

UN3082

14.2 UN Proper Shipping Name:

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)

14.3 Transport Hazard Class(es):

Transport class: 9

14.4 Packing Group:

Packing group: III

14.5 Environmental Hazards:

Environmentally hazardous: Yes

Marine pollutant: No

14.6 Special Precautions for User:

Special precautions: No special precautions.
Tunnel code: E
Transport category: 3

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code:

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health & Environmental Regulations/Legislation Specific for the Substance or Mixture:

15.2 Chemical Safety Assessment:

SECTION 16: OTHER INFORMATION

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.
* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: 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.
H360D: May damage the unborn child.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H411: 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 other 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 themselves as to the suitability of such information for their particular use.

Contact Details

Techsil Ltd
Unit 34, Bidavon Industrial Estate, Waterloo Road, Bidford on Avon, Warwickshire, B50 4JN
Tel: +44(0)1789 773232 Fax: +44(0)1789 774239 Email:sales@techsil.co.uk Web:www.techsil.co.uk

MATERIAL: TECHSIL EP25676 GREY HARDENER

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

1.1 Product Name: **Techsil EP25676 Grey Hardener**

1.2 Product Use:

1.3 Supplier:

Techsil Ltd
34 Bidavon Industrial Estate
Waterloo Road
Bidford on Avon
Warwickshire
B50 4JN
Tel: +44(0)1789 773232
Fax: +44(0)1789 774239
Email: sales@techsil.co.uk

1.4 Emergency Telephone: **+44(0)7970025933**

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

Classification under CLP: Acute Tox. 4: H302+312; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; Skin Sens. 1: H317
Most important adverse effects: Harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2 Label Elements:

Label elements:
Hazard statements: H302+312: Harmful if swallowed or in contact with skin.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.

Signal words: Danger

Hazard pictograms:
GHS05: Corrosion
GHS07: Exclamation mark


Precautionary statements: P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P308+313: IF exposed or concerned: Get medical advice/attention.

2.3 Other Hazards:

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Chemical identity: 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

3.2 Mixtures:

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.
Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.
Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.
Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2 Most Important Symptoms and Effects, both Acute and Delayed:

Skin contact: There may be irritation and redness at the site of contact.
Eye contact: There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed:

Immediate / special treatment: Not applicable.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media:

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2 Special Hazards Arising from the Substance or Mixture:

Exposure hazards: In combustion emits toxic fumes.

5.3 Advice for Firefighters:

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental Precautions:

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and Material for Containment and Cleaning-Up:

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to Other Sections:

Reference to other sections: Refer to section 8 of SDS.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2 Conditions for Safe Storage, Including and Incompatibilities:

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

7.3 Specific End Use(s):

Specific end use(s): No data available.

SECTION 8: HANDLING AND STORAGE

8.1 Control Parameters:

Workplace exposure limits: No data available.

DNEL / PNEC No data available.

8.2 Exposure Controls:

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.
Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.
Hand protection: Impermeable gloves.
Eye protection: Safety glasses. Ensure eye bath is to hand.
Skin protection: Impermeable protective clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

State: Liquid
Colour: Colourless
Odour: Characteristic odour
Oxidising: Non-oxidising (by EC criteria)
Solubility in water: Soluble
Viscosity: Non-viscous
Boiling point/range°C: >160
Flash point°C: >160
Relative density: 0.93

9.2 Other Information:

Other information: No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Reactivity: Stable under recommended transport or storage conditions.

10.2 Chemical Stability:

Chemical stability: Stable under normal conditions.

10.3 Possibility of Hazardous Reactions:

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to Avoid:

Conditions to avoid: Heat.

10.5 Incompatible Materials:

Materials to avoid: Strong oxidising agents. Strong acids.

10.6 Hazardous Decomposition Products:

Haz. decomp. products: In combustion emits toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Hazardous ingredients:
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

ORAL	RAT	LD50	1030	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	DRM ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Hazardous ingredients:
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Daphnia magna	48 H EC50	17.4	Mg/l

12.2 Persistence and Degradability:

Persistence and degradability: Not biodegradable.

12.3 Bioaccumulative Potential:

Bioaccumulative potential: Bioaccumulation potential.

12.4 Mobility in Soil:

Mobility: Readily absorbed into soil.

12.5 Results of PBT and vPvB Assessment:

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6 Other Adverse Effects:

Other adverse effects: Toxic to aquatic organisms. Toxic to soil organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.
Waste code number: 08-04-09
NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number:

UN2735

14.2 UN Proper Shipping Name:

Shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.
(3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE)

14.3 Transport Hazard Class(es):

Transport class: 8

14.4 Packing Group:

Packing group: III

14.5 Environmental Hazards:

Environmentally hazardous: No **Marine pollutant:** No

14.6 Special Precautions for User:

Special precautions: No special precautions.
Tunnel code: E
Transport category: 3

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code:

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health & Environmental Regulations/Legislation Specific for the Substance or Mixture:

15.2 Chemical Safety Assessment:

SECTION 16: OTHER INFORMATION

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.
* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302+312: Harmful if swallowed or in contact with skin.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.

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Contact Details

Techsil Ltd
Unit 34, Bidavon Industrial Estate, Waterloo Road, Bidford on Avon, Warwickshire, B50 4JN
Tel: +44(0)1789 773232 Fax: +44(0)1789 774239 Email:sales@techsil.co.uk Web:www.techsil.co.uk