



# HB MIO EPOXY BUILD FINISH EM97

## A high performance two pack epoxy solvent based micaceous iron oxide build coating and finish

### Recommended Areas of Use

As an intermediate build coat or finish on suitably primed steel and non-ferrous substrates. This product produces a tough, hard wearing coating that is recoatable even after long periods of exposure.

### Certificates & Approvals

Manufactured under the auspices of an ISO 9001:2008 quality & ISO 14001:2004 environmental management systems.

2004/42/EC EU limit value for this product (cat.A/j sb): 500g/l (2010). This product contains max. 375 g/l VOC.

### Properties

<b>Gloss</b>	Eggshell (approx. 20%)	<b>Surface dry</b>	2 hours
<b>Theoretical Coverage</b>	7.5 m <sup>2</sup> /L/coat	<b>Minimum over coating time</b>	3 hours minimum
<b>Recommended number of coats</b>	1 to 2 coats, depending upon desired build.	<b>Maximum over coating time</b>	Unlimited
<b>Density</b>	1.67 kg/L	<b>Minimum application conditions</b>	Temperature > 10°C, RH < 65% (but must be 3°C above dew point)
<b>Volume solids</b>	56% (mixed)	<b>Time to light traffic</b>	24 hours minimum, after final coat
<b>Flash point (Abel closed cup)</b>	27°C	<b>Shelf life</b>	12 months minimum in original unopened containers.
<b>VOC</b>	375 g/L	<b>Colour range</b>	Natural & Silver Grey plus limited range of additional metallic colours.
<b>Thinner / Cleaning</b>	Bradite Thinner TE36	<b>Temperature Resistance</b>	200°C (some discolouration may occur)
<b>Pot Life</b>	6 hours (see notes section)	<b>Mix Ratio</b>	Base & Activator tins are supplied pre-measured. For part mixing use: 3:1 (v/v) or 100:18 pbw
<b>Recommended wet film thickness</b>	134 microns/coat	<b>Recommended dry film thickness</b>	75 microns/coat

### Suitable Surfaces

For internal & external steel & non-ferrous substrates which are dry, free of contamination and have been properly prepared and primed. Compatibility with existing coatings should be confirmed by preparing and painting a test patch. [Note, not suitable for applying over asphalt, bitumen, epoxy tar, alkyd, chlorinated rubber or vinyl based paints.]

### Application Information

Application and use should always conform to the codes of practice described in BS 6150 and BS 5493.

**Brush and Roller** – supplied ready for use. Thin, if required, with 0 - 10% Bradite Thinner TE36.

**Conventional Air Spraying** - Thin with 10 - 20% Bradite Thinner TE36 as required, tip size - 3.0mm, tip pressure 60psi (0.4MPa) approximately.

**Airless Spraying** - Thin with 0 - 15% Bradite Thinner TE36 as required, tip size - 19 thou (0.48mm) approximately, tip pressure - 2100 psi (15MPa) approximately.

## Cleaning

Clean all equipment immediately after use with Bradite Thinner TE36 for best results.

## Specifications

### Preparation – industrial protective coating

High pressure steam cleaning to remove all loose, flaking paint and contamination back to a sound surface. Bradite TD39 industrial strength detergent, washing and rinsing should be used with scrubbing to remove grease or oil.

For new or total repair, steel should be blast cleaned to SIS Sa 2<sup>1/2</sup> minimum with a blast profile of 35-50 microns. (For maintenance repair, sweep blast or mechanically abrade existing coating to provide a key. Damaged or rusty areas should be blast cleaned to SIS Sa 2<sup>1/2</sup> or mechanically to SIS St 3 minimum).

1st coat	Bradite Surface Tolerant Epoxy Primer EP92*
2nd coat	Bradite HB MIO Epoxy Build Finish EM97
3rd coat	Bradite Polyurethane Gloss Finish PG77
4th coat	Bradite Polyurethane Gloss Finish PG77

\* Substitute with Bradite Barrier Primer EU96 on galvanised metal, aluminium and other non-ferrous metal surfaces.

For maintenance painting the 1<sup>st</sup> coat will be a touch up to bare areas only.

### Preparation – wet blasted steel

High pressure steam cleaning to remove all loose, flaking paint and contamination back to a sound surface. Bradite TD39 industrial strength detergent, washing and rinsing should be used with scrubbing to remove grease or oil.

Steel should be wet blast cleaned to SIS Sa 2<sup>1/2</sup> minimum with a blast profile of 35-50 microns then rinsed with fresh water, with excess water being blown off with oil free compressed air. (For maintenance repair, wet blast as previous, feather existing coating to a sound edge and abrade to provide a key.)

## Painting System

1st coat	Bradite Surface Tolerant Epoxy Primer EP92
2nd coat	Bradite HB MIO Epoxy Build Finish EM97
3rd coat	Bradite Polyurethane Gloss Finish PG77

For maintenance painting the 1<sup>st</sup> coat will be a touch up to bare areas only.

### Preparation – high temperature applications (200°C)

High pressure steam cleaning to remove all loose, flaking paint and contamination back to a sound surface. Bradite TD39 industrial strength detergent, washing and rinsing should be used with scrubbing to remove grease or oil.

For new or total repair, steel should be blast cleaned to SIS Sa 2<sup>1/2</sup> minimum with a blast profile of 35-50 microns. (For maintenance repair, sweep blast or mechanically abrade existing coating to provide a key. Damaged or rusty areas should be blast cleaned to SIS Sa 2<sup>1/2</sup> or mechanically to SIS St 3 minimum).

## Painting System

1st coat	Bradite HB MIO Epoxy Build Finish EM97
2nd coat	Bradite HB MIO Epoxy Build Finish EM97
3rd coat	Bradite HB MIO Epoxy Build Finish EM97

## Notes

An induction period of 20 minutes after mixing is required if material temperatures are below 10°C.

## Summary Safety Information

Always refer to the Health and Safety sheet for the product before use, and observe the warning phrases on the label.

**Disclaimer** - The information on this data sheet is correct to the best of our knowledge and experience. Bradite reserves the right to modify data contained herein, without notice. The information supplied does not absolve users from responsibility to carry out their own tests and experiments, nor does it imply any legally binding assurance of certain properties or suitability for any specific purpose. Conditions of service and application may be beyond our control, so no liability whatsoever can be accepted on the basis of the information supplied herein.

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

### 1.1. Product identifier

**Product name:** 2K EPOXY MIO BUILD COAT

**Product code:** EM97

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

**Use of substance / mixture:** PC9a: Coatings and paints, thinners, paint removers.

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

**Company name:** Bradite Paints  
Ogwen Valley Works  
Bethesda  
Gwynedd  
LL57 4YP  
United Kingdom

**Tel:** +44 (0)1248 600315

**Fax:** +44 (0)1248 602782

**Email:** [sales@bradite.com](mailto:sales@bradite.com)

### 1.4. Emergency telephone number

**Emergency tel:** +44 (0)1248 600315  
(office hours only)

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CLP:** Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317

**Most important adverse effects:** Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

**Label elements:**

**Hazard statements:** H226: Flammable liquid and vapour.  
H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H412: Harmful to aquatic life with long lasting effects.

**Signal words:** Warning

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**Hazard pictograms:** GHS02: Flame

GHS07: Exclamation mark



**Precautionary statements:** P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241: Use explosion-proof electrical/ventilating/lighting/.. equipment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+352: IF ON SKIN: Wash with plenty of water/soap and water.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

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**

**3.2. Mixtures**

**Hazardous ingredients:**

**XYLENE**

EINECS	CAS	PBT / WEL	CLP Classification	Percent
215-535-7	1330-20-7	-	Flam. Liq. 3: H226; Acute Tox. 4: H332; Acute Tox. 4: H312; Skin Irrit. 2: H315	1-10%

**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%
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**ISOBUTANOL**

201-148-0	78-83-1	-	Flam. Liq. 3: H226; Acute Tox. 4: H302; STOT SE 3: H335; Skin Irrit. 2: H315; Eye Dam. 1: H318; STOT SE 3: H336	1-10%
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**1-METHOXY-2-PROPANOL**

203-539-1	107-98-2	-	Flam. Liq. 3: H226; STOT SE 3: H336	1-10%
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ETHYLBENZENE

202-849-4	100-41-4	-	Flam. Liq. 2: H225; Acute Tox. 4: H332; STOT RE 2: H373; Asp. Tox. 1: H304	1-10%
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LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.

265-199-0	64742-95-6	-	Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H335; Aquatic Chronic 2: H411	<1%
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**Section 4: First aid measures**

**4.1. Description of first aid measures**

**Skin contact:** Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to 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. 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 pain.

**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.

**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:** Show this safety data sheet to the doctor in attendance.

**Section 5: Fire-fighting measures**

**5.1. Extinguishing media**

**Extinguishing media:** Carbon dioxide. Alcohol or polymer foam. Dry chemical powder. Do not use water.

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

**Exposure hazards:** In combustion emits toxic fumes.

**5.3. Advice for fire-fighters**

**Advice for fire-fighters:** Wear self-contained breathing apparatus.

**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.

[cont...]

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**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. Refer to section 13 of SDS for suitable method of disposal.

**6.4. Reference to other sections**

**Reference to other sections:** Refer to section 13 of SDS.

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling requirements:** Ensure there is sufficient ventilation of the area. Smoking is forbidden.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Store in a cool, well ventilated area. Keep away from sources of ignition.

**Suitable packaging:** Must only be kept in original packaging.

**Storage quantity limits:** 250 L

**7.3. Specific end use(s)**

**Specific end use(s):** PC9a: Coatings and paints, thinners, paint removers.

**Section 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Hazardous ingredients:**

**XYLENE**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	220 mg/m3	441 mg/m3	-	-

**ISOBUTANOL**

UK	154 mg/m3	231 mg/m3	-	-
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**1-METHOXY-2-PROPANOL**

UK	375 mg/m3	560 mg/m3	-	-
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**ETHYLBENZENE**

UK	441 mg/m3	552 mg/m3	-	-
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**DNEL/PNEC Values**

**DNEL / PNEC** No data available.

[cont...]

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**8.2. Exposure controls**

- Engineering measures:** Ensure there is sufficient ventilation of the area.
- Respiratory protection:** Gas/vapour filter, type A: organic vapours (EN141).
- Hand protection:** Gloves (solvent-resistant).
- Eye protection:** Tightly fitting safety goggles.
- Skin protection:** Protective clothing with elasticated cuffs and closed neck.
- Environmental:** Prevent from entering in public sewers or the immediate environment.

**Section 9: Physical and chemical properties**

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

- State:** Liquid
- Colour:** Various
- Odour:** Characteristic odour
- Evaporation rate:** Slow
- Oxidising:** Non-oxidising (by EC criteria)
- Solubility in water:** Not miscible
- Also soluble in:** Most organic solvents.
- Viscosity:** Non-viscous
- Boiling point/range°C:** No data available.
- Melting point/range°C:** No data available.
- Flammability limits %: lower:** 1.0
- Flash point°C:** 23 - 55
- Part.coeff. n-octanol/water:** No data available.
- Autoflammability°C:** No data available.
- Vapour pressure:** No data available.
- Relative density:** 1.78
- pH:** Not applicable.
- VOC g/l:** 308

**9.2. Other information**

**Other information:** Not applicable.

**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.

**10.4. Conditions to avoid**

**Conditions to avoid:** Direct sunlight. Sources of ignition.

**10.5. Incompatible materials**

**Materials to avoid:** Strong acids. Strong bases. Strong oxidising agents.

[cont...]



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**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:**

**XYLENE**

ORL	MUS	LD50	2119	mg/kg
ORL	RAT	LD50	4300	mg/kg
SCU	RAT	LD50	1700	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

**ISOBUTANOL**

IVN	MUS	LD50	417	mg/kg
IVN	RAT	LD50	340	mg/kg
ORL	RAT	LD50	2460	mg/kg

**1-METHOXY-2-PROPANOL**

IVN	RAT	LD50	4200	mg/kg
ORL	MUS	LD50	11700	mg/kg
ORL	RAT	LDLO	3739	mg/kg

**ETHYLBENZENE**

IPR	MUS	LD50	2624	µl/kg
ORL	RAT	LD50	3500	mg/kg

**LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.**

ORL	RAT	LD50	8400	mg/kg
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**Relevant hazards for substance:**

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

[cont...]

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Respiratory/skin sensitisation	DRM	Hazardous: calculated
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**Symptoms / routes of exposure**

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and pain.

**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.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Other information:** Not applicable.

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity values:** No data available.

**12.2. Persistence and degradability**

**Persistence and degradability:** No data available.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** No data available.

**12.4. Mobility in soil**

**Mobility:** No data available.

**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:** No data available.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

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

**Recovery operations:** Solvent reclamation/regeneration.

**Waste code number:** 08 01 11

**Disposal of packaging:** Retain for recovery.

**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**

**UN number:** UN1263

[cont...]

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**14.2. UN proper shipping name**

Shipping name: PAINT

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

Transport class: 3

**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: D/E

Transport category: 3

**Section 15: Regulatory information**

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

Specific regulations: Not applicable.

**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**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:** H225: Highly flammable liquid and vapour.

H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H312: Harmful in contact with skin.

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.

[cont...]

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H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

**Section 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

**Product name:** EPOXY ACTIVATOR (EC88A/EM97A/EP92A)

**Product code:** See above

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

**Use of substance / mixture:** PC9a: Coatings and paints, thinners, paint removers.

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

**Company name:** Bradite Paints  
Ogwen Valley Works  
Bethesda  
Gwynedd  
LL57 4YP  
United Kingdom

**Tel:** +44 (0)1248 600315

**Fax:** +44 (0)1248 602782

**Email:** [sales@bradite.com](mailto:sales@bradite.com)

**1.4. Emergency telephone number**

**Emergency tel:** +44 (0)1248 600315  
(office hours only)

**Section 2: Hazards identification**

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

**Classification under CLP:** STOT SE 3: H336; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335

**Most important adverse effects:** Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

**Label elements:**

**Hazard statements:** H226: Flammable liquid and vapour.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

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EPOXY ACTIVATOR (EC88A/EM97A/EP92A)

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H336: May cause drowsiness or dizziness.

H412: Harmful to aquatic life with long lasting effects.

**Signal words:** Danger

**Hazard pictograms:** GHS02: Flame

GHS05: Corrosion

GHS07: Exclamation mark



**Precautionary statements:** P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241: Use explosion-proof electrical/ventilating/lighting/. equipment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+352: IF ON SKIN: Wash with plenty of water/soap and water.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

## 2.3. Other hazards

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

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

##### XYLENE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
215-535-7	1330-20-7	-	Flam. Liq. 3: H226; Acute Tox. 4: H332; Acute Tox. 4: H312; Skin Irrit. 2: H315	10-30%

##### DIMER/TOFA REACTION PRODUCTS WITH TETA

-	68082-29-1	-	Skin Sens. 1: H317	10-30%
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##### ISOBUTANOL

201-148-0	78-83-1	-	Flam. Liq. 3: H226; Acute Tox. 4: H302; STOT SE 3: H335; Skin Irrit. 2: H315; Eye Dam. 1: H318; STOT SE 3: H336	10-30%
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[cont...]

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## 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	10-30%
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## 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

202-013-9	90-72-2	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315	1-10%
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## 3,6-DIAZAOCTANETHYLENEDIAMINE

203-950-6	112-24-3	-	Acute Tox. 4: H312; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412	1-10%
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## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to 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. 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 pain.

**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.

**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:** Show this safety data sheet to the doctor in attendance.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Carbon dioxide. Alcohol or polymer foam. Dry chemical powder. Do not use water.

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

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus.

[cont...]

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**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.

**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. Refer to section 13 of SDS for suitable method of disposal.

**6.4. Reference to other sections**

**Reference to other sections:** Refer to section 13 of SDS.

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling requirements:** Ensure there is sufficient ventilation of the area. Smoking is forbidden.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Store in a cool, well ventilated area. Keep away from sources of ignition.

**Suitable packaging:** Must only be kept in original packaging.

**Storage quantity limits:** 250 L

**7.3. Specific end use(s)**

**Specific end use(s):** PC9a: Coatings and paints, thinners, paint removers.

**Section 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Hazardous ingredients:**

**XYLENE**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA		15 min. STEL	
	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	220 mg/m <sup>3</sup>	441 mg/m <sup>3</sup>	-	-

**ISOBUTANOL**

UK	154 mg/m <sup>3</sup>	231 mg/m <sup>3</sup>	-	-
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**DNEL/PNEC Values**

**DNEL / PNEC** No data available.



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## 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Gas/vapour filter, type A: organic vapours (EN141).

**Hand protection:** Gloves (solvent-resistant).

**Eye protection:** Tightly fitting safety goggles.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck.

**Environmental:** Prevent from entering in public sewers or the immediate environment.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Pale yellow

**Odour:** Characteristic odour

**Evaporation rate:** Slow

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Not miscible

**Also soluble in:** Most organic solvents.

**Viscosity:** Non-viscous

**Boiling point/range°C:** > 100

**Melting point/range°C:** No data available.

**Flammability limits %: lower:** 1.0

**upper:** No data available.

**Flash point°C:** 23 - 55

**Part.coeff. n-octanol/water:** No data available.

**Autoflammability°C:** No data available.

**Vapour pressure:** No data available.

**Relative density:** 0.92

**pH:** Not applicable.

**VOC g/l:** 478

### 9.2. Other information

**Other information:** Not applicable.

## 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.

### 10.4. Conditions to avoid

**Conditions to avoid:** Direct sunlight. Sources of ignition.

[cont...]

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## 10.5. Incompatible materials

**Materials to avoid:** Strong acids. Strong bases. Strong oxidising agents.

## 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:

##### XYLENE

ORL	MUS	LD50	2119	mg/kg
ORL	RAT	LD50	4300	mg/kg
SCU	RAT	LD50	1700	mg/kg

##### ISOBUTANOL

IVN	MUS	LD50	417	mg/kg
IVN	RAT	LD50	340	mg/kg
ORL	RAT	LD50	2460	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

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

ORL	RAT	LD50	1200	mg/kg
SKN	RAT	LD50	1280	mg/kg

##### 3,6-DIAZAOCTANETHYLENEDIAMINE

IVN	MUS	LD50	350	mg/kg
ORL	MUS	LD50	1600	mg/kg
ORL	RAT	LD50	2500	mg/kg

#### Relevant hazards for substance:

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

[cont...]

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Respiratory/skin sensitisation	DRM	Hazardous: calculated
STOT-single exposure	INH	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 pain.

**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.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Other information:** Not applicable.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** No data available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No data available.

### 12.4. Mobility in soil

**Mobility:** No data available.

### 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:** No data available.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

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

**Recovery operations:** Solvent reclamation/regeneration.

**Waste code number:** 08 01 11

**Disposal of packaging:** Retain for recovery.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

[cont...]

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**14.1. UN number**

UN number: UN1263

**14.2. UN proper shipping name**

Shipping name: PAINT

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

Transport class: 3

**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: D/E

Transport category: 3

**Section 15: Regulatory information**

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

Specific regulations: Not applicable.

**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**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:** 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.

[cont...]

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H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.