



**SAFETY DATA SHEET**  
ALTOPROOF SOLO UNIVERSAL HARDENER

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Compilation date: 12/09/2012

Revision No: 1

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

**1.1. Product identifier**

**Product name:** ALTOPROOF SOLO UNIVERSAL HARDENER

**Product code:** DPMU6H

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

**Use of substance / mixture:** Industrial Flooring - hardener

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

**Company name:** ALTRO RESIN SYSTEMS

Unit 3, Station Road Industrial Estate

Maiden Newton

Dorchester

Dorset

DT2 0AE

UK

**Tel:** 01300 320620

**Fax:** 01300 321122

**Email:** info@altro.com

**1.4. Emergency telephone number**

**Emergency tel:** 01462 480480

(office hours only)

**Section 2: Hazards identification**

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

**Classification under CHIP:** Xn: R20/22; C: R34; Sens.: R43

**Most important adverse effects:** Harmful by inhalation and if swallowed. Causes burns. May cause sensitisation by skin contact.

**2.2. Label elements**

**Label elements under CHIP:**

**Hazard symbols:** Corrosive.



**Risk phrases:** R20/22: Harmful by inhalation and if swallowed.

R34: Causes burns.

R43: May cause sensitisation by skin contact.

[cont...]

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**Safety phrases:** S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**2.3. Other hazards**

**PBT:** This substance is not identified as a PBT substance.

**Section 3: Composition/information on ingredients**

**3.2. Mixtures**

**Hazardous ingredients:**

**BENZYL ALCOHOL**

EINECS	CAS	CHIP Classification	CLP Classification	Percent
202-859-9	100-51-6	Xn: R20/22	Acute Tox. 4: H332; Acute Tox. 4: H302	10-30%

**M-PHENYLENEBIS(METHYLAMINE)**

216-032-5	-	Xn: R20/22; C: R34; Sens.: R43; -: R52/53	-	10-30%
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**BUTYLPHENOL(PARA-TERT)**

202-679-0	98-54-4	Xi: R36/37/38	-	10-30%
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**PROPAN-1-OL**

200-746-9	71-23-8	F: R11; Xi: R41; -: R67	Flam. Liq. 2: H225; Eye Dam. 1: H318; STOT SE 3: H336	1-10%
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**3-AMINOPROPYLDIMETHYLAMINE**

203-680-9	109-55-7	-: R10; Xn: R22; C: R34; Sens.: R43	Flam. Liq. 3: H226; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317	1-10%
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**2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL**

202-013-9	90-72-2	Xn: R22; Xi: R36/38	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315	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.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** If conscious, give half a litre of water to drink immediately.

**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.

[cont...]

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**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

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Water. Carbon dioxide. Alcohol or polymer foam. Dry chemical powder.

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

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides.

### 5.3. Advice for fire-fighters

**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. Eliminate all sources of ignition.

### 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:** Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

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

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed.

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

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

[cont...]

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

**8.1. Control parameters**

**Hazardous ingredients:**

**PROPAN-1-OL**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	500 mg/m <sup>3</sup>	625 mg/m <sup>3</sup>	-	-

**8.2. Exposure controls**

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

**Respiratory protection:** In cases of insufficient ventilation, wear suitable respiratory equipment (organic vapour and particulates)

**Hand protection:** Protective gloves.

**Eye protection:** Tightly fitting safety goggles. Face-shield.

**Skin protection:** Protective clothing.

**Section 9: Physical and chemical properties**

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

**State:** Liquid

**Colour:** Orange-brown

**Odour:** Characteristic odour

**Solubility in water:** Slightly soluble

**9.2. Other information**

**Other information:** Not applicable.

**Section 10: Stability and reactivity**

**10.1. Reactivity**

**10.2. Chemical stability**

**Chemical stability:** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

**10.4. Conditions to avoid**

**Conditions to avoid:** Heat.

**10.5. Incompatible materials**

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

[cont...]

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## 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	INH ING	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated
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.

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

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** Not applicable.

### 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 substance is not identified as a PBT substance.

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

[cont...]

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**13.1. Waste treatment methods**

**Disposal operations:** Cured material must be disposed of as plastic waste; uncured material and containers must be disposed of in accordance to local council regulations.

**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:** UN3267

**14.2. UN proper shipping name**

**Shipping name:** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(3-AMINOPROPYLDIMETHYLAMINE; M-PHENYLENEBIS(METHYLAMINE))

**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

**Section 15: Regulatory information**

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

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

H226: Flammable liquid and vapour.

[cont...]

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H302: Harmful if swallowed.

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.

H336: May cause drowsiness or dizziness.

R10: Flammable.

R11: Highly flammable.

R20/22: Harmful by inhalation and if swallowed.

R22: Harmful if swallowed.

R34: Causes burns.

R36/37/38: Irritating to eyes, respiratory system and skin.

R36/38: Irritating to eyes and skin.

R41: Risk of serious damage to eyes.

R43: May cause sensitisation by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67: Vapours may cause drowsiness and dizziness.

**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.







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ALTROPROOF SOLO UNIVERSAL BASE

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Compilation date: 12/09/2012

Revision No: 1

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

**1.1. Product identifier**

**Product name:** ALTROPROOF SOLO UNIVERSAL BASE

**Product code:** DPMUB017

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

**Use of substance / mixture:** Industrial Flooring - base

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

**Company name:** ALTRO RESIN SYSTEMS

Unit 3, Station Road Industrial Estate

Maiden Newton

Dorchester

Dorset

DT2 0AE

UK

**Tel:** 01300 320620

**Fax:** 01300 321122

**Email:** info@altro.com

**1.4. Emergency telephone number**

**Emergency tel:** 01462 480480

(office hours only)

**Section 2: Hazards identification**

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

**Classification under CHIP:** Xi: R36/38; Sens.: R43; N: R51/53

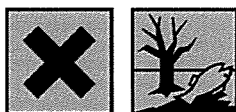
**Most important adverse effects:** Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2. Label elements**

**Label elements under CHIP:**

**Hazard symbols:** Irritant.

Dangerous for the environment.



**Risk phrases:** R36/38: Irritating to eyes and skin.

[cont...]

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R43: May cause sensitisation by skin contact.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:** S24: Avoid contact with skin.

S37: Wear suitable gloves.

S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

**Precautionary phrases:** Contains epoxy constituents. See information supplied by the manufacturer.

**2.3. Other hazards**

**PBT:** This substance is not identified as a PBT substance.

**Section 3: Composition/information on ingredients**

**3.2. Mixtures**

**Hazardous ingredients:**

BISPHENOL A/F- EPOXY RESINS MW <700

EINECS	CAS	CHIP Classification	CLP Classification	Percent
-	40216-08-8	Xi: R36/38; Sens.: R43; N: R51/53	-	30-50%

OXIRANE, MONO[(C12-14ALKYLOXY)METHYL] DERIVATIVES

271-846-8	68609-97-2	Xi: R38; Sens.: R43	Skin Irrit. 2: H315; Skin Sens. 1: H317	1-10%
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**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**

[cont...]

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**Section 5: Fire-fighting 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 fire-fighters**

**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.

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

**Storage conditions:** Store in 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.

[cont...]

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

**8.1. Control parameters**

**Workplace exposure limits:** Not applicable.

**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:** Barely perceptible odour

**Evaporation rate:** Negligible

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

**Solubility in water:** Insoluble

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

**Viscosity:** Viscous

**Flash point°C:** >100

**9.2. Other information**

**Other information:** Not applicable.

**Section 10: Stability and reactivity**

**10.1. Reactivity**

**10.2. Chemical stability**

**Chemical stability:** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

**10.4. Conditions to avoid**

**Conditions to avoid:** Heat.

**10.5. Incompatible materials**

**Materials to avoid:** Amines.

[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**

**Relevant effects for mixture:**

Effect	Route	Basis
Irritation	OPT DRM	Hazardous: calculated
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**

**Ecotoxicity values:** Not applicable.

**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 substance is not identified as a PBT 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.

[cont...]

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**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: UN3082

**14.2. UN proper shipping name**

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(BISPHENOL A/F- EPOXY RESINS MW <700)

**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

**Section 15: Regulatory information**

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

**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 3:** H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

R36/38: Irritating to eyes and skin.

R38: Irritating to skin.

R43: May cause sensitisation by skin contact.

[cont...]

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R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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.

