



SAFETY DATA SHEET

Altro Seal water-based matt hardener

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Altro Seal water-based matt hardener

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

Identified uses Hardener.

1.3. Details of the supplier of the safety data sheet

Supplier Altro Resin Systems Ltd
Unit 3 Station Rd Industrial Estate
Maiden Newton
Dorchester
Dorset
DT2 0AE
Tel: 01300320620
Fax: 01300321122

info@altro.com

1.4. Emergency telephone number

Emergency telephone +44(0)1462480480 (Monday-Friday 09.00-17.00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (67/548/EEC or 1999/45/EC) Xn;R20. Xi;R37. R43.

2.2. Label elements

Contains hexamethylene-1,6-diisocyanate homopolymer, HEXAMETHYLENE-DI-ISOCYANATE

2.3. Other hazards

Not available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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HEXAMETHYLENE-DI-ISOCYANATE		<1%
CAS number: 822-06-0	EC number: 212-485-8	
Classification Acute Tox. 3 - H331 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) T;R23 R42/43 Xi;R36/37/38	

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

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

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

Inhalation	There may be a feeling of tightness in the chest with shortness of breath.
Ingestion	Nausea and stomach pain may occur.
Skin contact	There may be mild irritation at the site of contact
Eye contact	There may be irritation and pain

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

Notes for the doctor	No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Carbon dioxide. Dry chemical powder. Alcohol resistant foam

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products In combustion emits toxic fumes of carbon monoxide. In combustion emits toxic fumes of nitrogen oxides.

5.3. Advice for firefighters

Special protective equipment for firefighters 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

6.2. Environmental precautions

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Environmental precautions Contain the spillage using bunding

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb into dry earth or sand. Refer to section 13 of SDS for suitable method of disposal

6.4. Reference to other sections

Reference to other sections See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

HEXAMETHYLENE-DI-ISOCYANATE

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m³(Sen)

Short-term exposure limit (15-minute): WEL 0.07 mg/m³(Sen)

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment



SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Colourless liquid.

Flash point 184°C

Solubility(ies) Insoluble in water.

9.2. Other information

Other information Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under normal conditions

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10.3. Possibility of hazardous reactions

Possibility of 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 Avoid heat.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 390.0

Species Rat

ATE inhalation (gases ppm) 5,117.7904143

ATE inhalation (vapours mg/l) 12.62916188

ATE inhalation (dusts/mists mg/l) 1.72612198

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig:

Inhalation Irritating to respiratory system.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity There is no information on the product itself

Acute toxicity - fish LC₅₀, 96 hours: 28.3 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: >100 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability Not readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulative potential Does not significantly accumulate in organisms.

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12.4. Mobility in soil

Mobility Highly insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not identified as a PBT substance

12.6. Other adverse effects

Other adverse effects No information required.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Cured Material may be disposed of as plastic waste, uncured material and containers must be disposed of in accordance to local council regulations

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport labels

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

National regulations The provision of Safety Data Sheets comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals Hazard Information and Packaging Regulations). This is an addition to the Health and Safety at Work Act 1974.

15.2. Chemical safety assessment

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A chemical safety assessment has not been carried out for the substance or the Mixture by the supplier.

SECTION 16: Other information

Revision date	27/09/2016
Revision	2
SDS number	21392
Risk phrases in full	R20 Harmful by inhalation. R23 Toxic by inhalation. R36/37/38 Irritating to eyes, respiratory system and skin. R37 Irritating to respiratory system. R42/43 May cause sensitisation by inhalation and skin contact. R43 May cause sensitisation by skin contact.
Hazard statements in full	EUH208 Contains . May produce an allergic reaction. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H335 May cause respiratory irritation.