

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 19/06/2023 Revision date: 19/06/2023 Supersedes version of: 16/09/2016 Version: 3.0

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

1.1. Product identifier

Product form : Mixture

Product name : Altro Crete 6mm Slip-resistant Fast-track / Altro Crete 8mm Slip-resistant Fast-track

Hardener

Product code : PUHDFTH
Product group : End product

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

Use of the substance/mixture : Polyurethane Hardener - Industrial floor coating

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SupplierOtherAltro Resin SystemsAltro GmbH

Unit 3 Station Road Industrial Estate Ebertallee 209
Station Road 06846 Dessau-Roßlau

GB- DT2 0AE Maiden Newton Dorchester DE

T 01300 320620 T +49 (0) 340 6500-0

sds@altro.com - www.altro.com

1.4. Emergency telephone number

Emergency number : 01462 480480

Monday - Friday 09:00-17:00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

H332 Acute toxicity (inhalation:dust,mist) Category 4 Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 2 H319 Respiratory sensitisation, Category 1 H334 Skin sensitisation, Category 1 H317 Carcinogenicity, Category 2 H351 Specific target organ toxicity - Single exposure, Category 3, Respiratory H335 Specific target organ toxicity - Repeated exposure, Category 2 H373

Specific target organ toxicity – Repeated exposure, Category 2

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS07

7 GHS

Signal word (CLP) : Danger

Contains : Diphenylmethane-4,4-Diisocyante (MDI) Isomers; Xylene

Hazard statements (CLP) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 - May cause respiratory irritation. H351 - Suspected of causing cancer.

H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP) : P261 - Avoid breathing spray, vapours.

P280 - Wear protective clothing, eye protection, face protection, protective gloves.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

Extra phrases : As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Diphenylmethane-4,4-Diisocyante (MDI) Isomers	CAS-No.: 9016-87-9 EC-No.: 618-498-9	≥ 75	Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Xylene substance with national workplace exposure limit(s) (GB) (Note C)	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216- 32	≥1-<3	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412 (M=1)

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Take off all contaminated clothing and wash its before reuse.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Take off contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Causes eye irritation. redness, itching, tears.

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2). Dry powder. Foam. In case of a larger fire, water spray should be

used.

Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire and/or explosion do not breathe fumes. On burning: release of toxic

gases/vapours. Carbon oxides (CO, CO2). Nitrogenous substances.

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5.3. Advice for firefighters

Firefighting instructions : Control run-off water by containing and keeping it out of sewers and watercourses.

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling)

and collect in suitable container for disposal. This material and its container must be

disposed of in a safe way, and as per local legislation.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid contact with skin and eyes.

Contaminated work clothing should not be allowed out of the workplace. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when

eaving work

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in original container. Keep cool. Store in a dry place. Store in a closed container.

Store in a well-ventilated place. Keep container tightly closed.

Storage temperature : > 20 - < 35 °C

Storage area : Avoid contact with water or humidity. If moisture enters isocyanate containers, CO2 forms

and pressure builds up.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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Xylene (1330-20-7)		
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	220 mg/m³	
WEL TWA (OEL TWA) [2]	50 ppm	
WEL STEL (OEL STEL)	441 mg/m³	
WEL STEL (OEL STEL) [ppm]	< 100 ppm	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection

8.2.2.2. Skin protection

Skin and body protection:

Avoid contact with skin

Hand protection:

Standard EN 374 - Protective gloves against chemicals.

Other skin protection

Materials for protective clothing:

Keep work clothing separately

8.2.2.3. Respiratory protection

Respiratory protection:

Wear suitable respiratory equipment in case of insufficient ventilation

8.2.2.4. Thermal hazards

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8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Not available

Appearance : Liquid. Yellow-brown liquid.

Odour : Not available Odour threshold : Not available : < 10 °C Melting point Freezing point : Not available : > 300 °C Boiling point Flammability : Not available **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit : Not available Flash point : 229 °C Auto-ignition temperature : Not available Decomposition temperature : Not available : Not available Viscosity, kinematic : Not available Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available Not available Vapour pressure Vapour pressure at 50°C Not available Not available Density

Relative density : 1.2

Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal use. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Temperatures below 15°C.

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10.5. Incompatible materials

Acids. Amines. Bases. Water.

10.6. Hazardous decomposition products

In combustion emits toxic fumes.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

Altro (Crete 6mm SI	lip-resistant	Fast-track / Altro	Crete 8mm Slip	p-resistant Fa	st-track Hardener

ATE CLP (dust,mist) 1.5 mg/l/4h

Diphenylmethane-4,4-Diisocyante (MDI) Isomers (9016-87-9)

LD50 oral rat	10000
LD50 dermal rabbit	9400
LC50 Inhalation - Rat [ppm]	4500 ppm
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h
LC50 Inhalation - Rat (Vapours)	11 mg/l/4h

Xvlene (1330-20-7)

Xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat	27.124 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an

allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Diphenylmethane-4,4-Diisocyante (MDI) Isomers (9016-87-9)

NOAEL (chronic, oral, animal/male, 2 years)	0.2 mg/kg bodyweight Univar MSDS - (V3.002) 20/01/2021
NOAEL (chronic, oral, animal/female, 2 years)	1 mg/kg bodyweight Univar MSDS - (V3.002) 20/01/2021

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

Diphenylmethane-4,4-Diisocyante (MDI) Isomers (9016-87-9)

STOT-single exposure May cause respiratory irritation.

Xylene (1330-20-7)

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Diphenylmethane-4,4-Diisocyante (MDI) Isomers (9016-87-9)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

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Xylene (1330-20-7)		
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	: Not classified	

: Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

Not rapidly degradable

Not rapidly degradable				
Diphenylmethane-4,4-Diisocyante (MDI) Isomers (9016-87-9)				
LC50 - Fish [1]	> 1000 mg/l			
EC50 - Crustacea [1]	> 500 mg/l			
EC50 72h - Algae [1]	1640 mg/l			
Xylene (1330-20-7)				
LC50 - Fish [1]	2.6 mg/l Test species:- Oncorhynchus mykiss (Rainbow trout)			
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia			
EC50 - Crustacea [2]	1 mg/l Test organisms (species): Daphnia magna (Water flea)			
EC50 72h - Algae [1]	2.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (Green algae) Biomass; OECD Test Guideline 201			
EC50 72h - Algae [2]	4.36 mg/l Test organisms (species): Pseudokirchneriella subcapitata (Green algae) Growth rate; OECD Test Guideline 201			
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'			
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'			
NOEC chronic algae	0.44 mg/l Pseudokirchneriella subcapitata (Green algae) (OECD Test Guideline 201)			

12.2. Persistence and degradability

Diphenylmethane-4,4-Diisocyante (MDI) Isomers (9016-87-9)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) Waste treatment methods HP Code

- : Disposal must be done according to official regulations.
- : Must follow special treatment according to local regulation.
- : HP3 "Flammable:"
- flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
- flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air:
- flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
- flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
- water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
- other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
- HP5 "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
- HP6 "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
- HP7 "Carcinogenic:" waste which induces cancer or increases its incidence
- HP4 "Irritant skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.
- HP13 "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

SECTION 14: Transport information

In accordance with ADR / IMDG / ADN / RID

ADR	IMDG	ADN	RID			
14.1. UN number or ID number						
Not applicable	Not applicable	Not applicable	Not applicable			
14.2. UN proper shippin	14.2. UN proper shipping name					
Not applicable	Not applicable	Not applicable	Not applicable			
14.3. Transport hazard class(es)						
Not applicable	Not applicable	Not applicable	Not applicable			
14.4. Packing group						
Not applicable	Not applicable	Not applicable	Not applicable			

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ADR	IMDG	ADN	RID	
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

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SECTION 16: Other information

Full text of H- and EUH-statements:		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Asp. Tox. 1	Aspiration hazard, Category 1	
Carc. 2	Carcinogenicity, Category 2	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
H226	Flammable liquid and vapour.	
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.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H335	May cause respiratory irritation.	
H351	Suspected of causing cancer.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H412	Harmful to aquatic life with long lasting effects.	
Resp. Sens. 1	Respiratory sensitisation, Category 1	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.