

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product:

ALTUGLAS® CAST

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SDS No.: 001426-001 (Version 6.0)

Date 04.02.2014

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Generic Safety Data Sheet

1.1. Identification of the product

Identification of the mixture: ALTUGLAS® CAST

Grades : CN, CN colours, CN Fluo, CN Satin, CN Granite, CN Night & Day, CN Elit, CN Visio, CN LED System, CN Essential, CN UV Stop, CN Food contact, CN Easy Forming, CN ShieldUp, Metal & Pearl, CN Silverstar, CN Tatoo, CN SRD, CN Block, CN Blocks LED System, CS, CS EF, CS Sanitized

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

Use of the Substance/Mixture :

Production of pieces by heat-moulding processes, such as injection, extrusion, injection-blow moulding

1.3. Details of the supplier of the safety data sheet

Supplier

ALTUGLAS INTERNATIONAL Immeuble Vision Défense 89 boulevard National F-92257 La Garenne-Colombes Tel: +33 (0)1 78 66 23 00 Fax: +33 (0)1 78 66 23 96 http://www.altuglasint.com E-mail address: inforequest@altuglasint.com

1.4. Emergency telephone number

European emergency phone number : 112 For UK : National Chemical Emergency Centre Tel: 01865 407 333

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No 1272/2008):

This mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.

Classification according to EU Directives 1999/45/EC :

This mixture is not classified as dangerous according to Directive 1999/45/EC.

2.2. Label elements

Label elements (Regulation (EC) No 1272/2008):

No label necessary for this product.

2.3. Other hazards

Potential health effects:

Skin contact: Contact with the product, when handled at high temperatures, can cause serious burns. Risk of cutaneous irritation. Eye contact: Risk of eye irritation.

Physical and chemical hazards:

Thermal decomposition giving flammable and irritating products. Decomposition products: See chapter 10

Other:

Results of PBT and vPvB assessment : No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. <u>Mixtures</u>

Chemical nature of the mixture¹:

ACRYLIC AND METHACRYLIC COPOLYMERS Presence of additives

Hazardous impurities :

Chemical Name ¹	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification Regulation (EC) No 1272/2008
Methyl methacrylate	201-297-1	80-62-6	< 1,0 %	F; R11 Xi; R37/38 R43	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335
Butyl acrylate	205-480-7	141-32-2	< 1,0 %	Xn; R20 R10 Xi; R36/37/38 R43	Flam. Liq. 3; H226 Acute Tox. 4 (Inhalation); H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 3; H412

¹: See chapter 14 for Proper Shipping Name

²:See the text of the regulation for applicable exceptions or provisions : The transition time according to REACH Regulation, Article 23, is still not expired.

For the full text of the R, H, EUH-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1. & 4.2. Description of necessary first-aid measures & Most important symptoms/effects, acute and delayed:

Inhalation:

Inhalation of vapours due to thermal decomposition : Move to fresh air. Oxygen or artificial respiration if needed. In case of problems : Consult a physician.

Skin contact:

On contact with hot product : Cool skin rapidly with cold water after contact with molten polymer. Remove product with vegetable oil or paraffin. In case of adhesion, do not try to remove the product. Treat the affected areas as thermal burns. In case of extensive burns, hospitalize.

Eye contact:

On contact with hot product : Cool eyes rapidly with cold water after contact with molten polymer. Consult an ophthalmologist immediately.

Ingestion:

In case of problems : Consult a doctor.

Protection of first-aiders:

In case of insufficient ventilation, wear suitable respiratory equipment.

4.3.Indication of immediate medical attention and special treatment needed, if necessary : No data available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water spray, Dry powder, Carbon dioxide (CO2)

5.2. Special hazards arising from the substance or mixture:

Thermal decomposition giving flammable and irritating products:, Methyl methacrylate, Acrylates Formation of toxic products through combustion:, Carbon monoxide, Carbon dioxide (CO2)

5.3. Advice for firefighters:

ALTUGLAS® CAST

Specific methods:

Ensure a system for the rapid emptying of containers. In case of fire nearby, remove the bags.

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Avoid contact with the skin and the eyes. Use personal protective equipment. Avoid dust formation. Avoid breathing dust.

6.2. Environmental precautions:

Do not release into the environment. Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up:

Recovery:

Collect product by mechanical means.

Elimination:

Destroy the product by incineration (in accordance with local and national regulations).

6.4. Reference to other sections: None.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:

Storage and handling precautions applicable to products: Solid. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Provide showers, eye-baths Provide water supplies near the point of use.

Safe handling advice:

Remove all sources of ignition. Take precautionary measures against static discharges. Avoid the formation and deposition of dust. Only use safety equipment.

Hygiene measures:

Avoid contact with the skin and the eyes. Avoid breathing dust. Product handled when hot : Avoid inhalation of vapours. When using do not eat, drink or smoke.

Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:

Remove all sources of ignition. Store away from moisture and heat to maintain the technical properties of the product. Provide earthing and safe electrical equipment.

Incompatible products:

Strong oxidizing agents, Reducing agents, Bases

Packaging material:

Recommended: Polyethylene

7.3. Specific end use(s): None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Exposure Limit Values

Not relevant

Products of decomposition:

Methyl methacrylate

Source	Date	Value type	Value	Value	Remarks
			(ppm)	(mg/m3)	
EH40 WEL	12 2011	TWA	50	208	_
EH40 WEL	12 2011	STEL	100	416	-
ACGIH (US)	02 2012	TWA	50	-	_
ACGIH (US)	02 2012	STEL	100	_	_

Butyl acrylate

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
EH40 WEL	12 2011	STEL	5	26	-
EH40 WEL	12 2011	TWA	1	5	-
EU ELV	12 2009	TWA	2	11	Indicative value
EU ELV	12 2009	STEL	10	53	Indicative value
ACGIH (US)	02 2012	TWA	2	-	-

Derived No Effect Level (DNEL):

This information is not required.

Predicted No Effect Concentration:

This information is not required.

8.2. Exposure controls:

General protective measures:	Ensure ventilation of work areas and extraction of dust or vapours likely to be given off during conversion operations (product handled when hot).
Personal protective equipment:	
Respiratory protection:	In case of dust formation, wear a dust mask.
	In case of insufficient ventilation, wear suitable respiratory equipment. (product handled when hot).
Hand protection:	Gloves (product handled when hot)
Eye/face protection:	Safety glasses/goggles (product handled in molten state) - Wear face-shield and protective clothing in case of problems during processing
Skin and body protection:	Protective clothing (product handled in molten state)

Environmental exposure controls: See chapter 6

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	
Physical state (20°C):	solid
Form:	sheets, blocks
Colour:	transparent, or, translucent
	colourless, or, coloured
Odour:	No data available.
Olfactory threshold:	No data available.
pH:	not applicable
Melting point/range:	No data available.
Boiling point/boiling range:	No data available.
Flash point:	> 250 °C
Evaporation rate:	not applicable
Flammability (solid, gas):	No data available.
Vapour pressure:	No data available.
Vapour density:	No data available.
Relative density:	No data available.
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available.

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Auto-ignition temperature:	430 °C	
Decomposition temperature:	> 250 °C	
Viscosity, dynamic:	not applicable	
Explosive properties:		
Explosivity:	Not relevant (due to the chemical structure)	
Oxidizing properties:	Not relevant (due to the chemical structure)	
9.2. <u>Other data:</u>		
Solubility in other solvents:	Soluble in: , Chlorinated solvents , Aromatic solvents , ALDEHYDES , Ketones , A ESTERS	ACETIC
10. STABILITY AND REACTIVITY		
10.1. & 10.2. <u>Reactivity & Chemical st</u> The product is stable under normal h		
10.3. <u>Possibility of hazardous reaction</u> None under normal conditions of use		
10.4. <u>Conditions to avoid</u>: Protect from light. Avoid moisture. He	leat, flames and sparks.	
10.5. Incompatible materials to avoid Strong oxidizing agents, Reducing ag		
10.6. Hazardous decomposition prod	ducts:	
	°C nable and irritating products:, Methyl methacrylate, Acrylates combustion:, Carbon monoxide, Carbon dioxide (CO2)	
11. TOXICOLOGICAL INFORMATION		
11.1. Information on toxicological eff	fects:	
Acute toxicity:		
Ingestion:	According to its composition, can be considered as : Slightly harmful by ingestion	on
Dermal:	According to its composition, can be considered as : Slightly harmful in contact	with skin
Local effects (Corrosion / Irritation /	/ Serious eye damage):	
Skin contact:	According to its composition, can be considered as : Slightly or not irritating to a Contact with the product, when handled at high temperatures, can cause serious burns, temperature, products of thermal decomposition can be irritating to skin	
		., /
Eye contact:	According to its composition, can be considered as : Slightly or not irritating to e At high temperature, products of thermal decomposition can be irritating to eyes Contact with hot product will cause thermal burns.	
Eye contact: <u>Respiratory or skin sensitisation:</u>	At high temperature, products of thermal decomposition can be irritating to eyes	
·	At high temperature, products of thermal decomposition can be irritating to eyes	
Respiratory or skin sensitisation:	At high temperature, products of thermal decomposition can be irritating to eyes Contact with hot product will cause thermal burns. No data available.	. C
Respiratory or skin sensitisation:	At high temperature, products of thermal decomposition can be irritating to eyes Contact with hot product will cause thermal burns. No data available. Presence of :	. C
Respiratory or skin sensitisation: Inhalation:	At high temperature, products of thermal decomposition can be irritating to eyes Contact with hot product will cause thermal burns. No data available.	eyes

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Specific target organ toxicity :		
Single exposure :		
Inhalation:	At high temperature, products of thermal decomposition can be irritating to respirato	ry system
Repeated exposure:	Polymer No particular problems for man	
Aspiration hazard:	Not applicable	
12. ECOLOGICAL INFORMATION		
Ecotoxicology Assessment:	All available data on this product and/or the components quoted in section 3 and/or substances/metabolites have been taken into account for the hazard assessment.	the analogue
12.1. <u>Toxicity :</u>		
Fish:	No data available.	
Aquatic invertebrates:	No data available.	
Aquatic plants:	No data available.	
Microorganisms:	No data available.	
12.2. Persistence and degradability		
Biodegradation (In water):	no data available	
12.3. Bioaccumulative potential : No	data available.	
12.4. Mobility in soil - Distribution ar	nong environmental compartments: No data available.	
12.5. Results of PBT and vPvB asses	ssment :	
No data available.		
12.6. Other adverse effects: None kn	own.	
13. DISPOSAL CONSIDERATIONS		
13.1. Waste treatment:		
Disposal of product:	Destroy the product by incineration (in accordance with local and national regulation	s).
Disposal of packaging:	Destroy packaging by incineration at an approved waste disposal site (in accordance national regulations).	e with local and
14. TRANSPORT INFORMATION		
Not classified as dangerous in the mea	ning of transport regulations.	
15. REGULATORY INFORMATION		
Safety data sheets: according to Regul	ation (EC) No. 1907/2006	

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

UK REGULATION Chip3: Chemical (Hazard Information and Packaging for Supply) Regulations 2002

15.2. Chemical Safety Assessment:

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This information is not required.

INVENTORIES:	
EINECS:	Conforms to
TSCA:	Consult ALTUGLAS
AICS:	Conforms to
DSL:	This product contains one or several components that are not on the Canadian DSL nor NDSL lists.
ENCS (JP):	Conforms to
KECI (KR):	Conforms to
PICCS (PH):	Conforms to
IECSC (CN):	Conforms to
NZIOC:	Conforms to

16. OTHER INFORMATION

Full text of R, H, EUH-phrases referred to under sections 2 and 3

R10	Flammable.
R11	Highly flammable.
R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R43	May cause sensitisation by skin contact.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Update:

Safety datasheet sections which have been updated:	Type:
General update of Safety Data Sheet.	

Thesaurus:

NOAEL : No Observed Adverse Effect Level (NOAEL) LOAEL : Lowest Observed Adverse Effect Level (LOAEL) bw : Body weight food : oral feed dw : Dry weight vPvB : very Persistent and very Bioaccumulative PBT : Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).