

Safety Data Sheet

According to 1907/2006/EC, Article 31

STARCOAT PMMA REINFORCED FILLER

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

1.1 Product identifier

Trade name: STARCOAT PMMA REINFORCED FILLER

1.2 Relevant identified uses of the substance or mixture and uses advised against See Section 16
Application of the substance / the mixture Sealing

1.3. Details of the supplier of the safety data sheet

Supplier AXTER LTD, West Road, Ransomes Europark, Ipswich IP3 9SX UK

Tel: +44 (0) 1473 724056, 8.00 am to 5.30 pm, Monday to Friday

Email: info@axterltd.co.uk

1.4 Emergency telephone + 44 1473 724056 (NOT 24HRS - 8am - 5.30pm, Monday to Friday)

In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency

department.

Section 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2

H225 Highly flammable liquid and vapour.



GHS07

Skin Irrit.2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02



GHS07

Signal word Danger

Hazard-determining

components of labelling:Methyl methacrylate 2-ethylhexyl acrylate

Hazard statements

H225 Highly flammable liquid and vapour

H315 Causes skin irritation

H317 May cause an allergic skin reaction
H335 May cause respiratory irritation

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition surfaces. - No smoking.

P261 Avoid breathing vapours.

P280 Wear protective gloves/ eye protection.

P303+P361+P353 IF ON SKIN (or HAIR): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P312 Call a POISON CENTRE/ doctor if you feel unwell.

P403+P235 Store in a well-ventilated place. Keep cool.

2.3

Other hazards

Results of PBT and vPvB assessment

PBT Does not meet the PBT-criteria of Annex XIII of REACH

(self assessment).

vPvBDoes not meet the vPvB-criteria of Annex XIII of REACH

(self assessment).

Section 3: Composition/information on ingredients

3.1 Mixtures

Description Mixture of substances listed below with nonhazardous additions.

Dangerous components:			
CAS: 80-62-6 EINECS: 201-297-1 Reg No. 01-2119452498-28-0000 01-2119452498-28-0025 01-2119452498-28-0028	methyl methacrylate Flam. Liq. 2, H225; Skin Irrit.2, H315; Skin Sens.1, H317; STOT SE 3, H335	≥10-<20%	
CAS: 103-11-7 EINECS: 203-080-7 Reg No. 01-2119453158- 37	2- ethylhexyl acrylate Skin Irrit.2, H315; Skin Sens.1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	≥10-<20%	

Additional information

For the wording of the listed risk phrases refer to section 16.

Section 4: First aid measures

4.1	Description	of first sid	magairea
4.1	Describition	or ill'st alu	measures

General information Immediately remove any clothing soiled by the product.

Take affected persons out of danger area and lay down.

Involve doctor immediately.

After inhalation In case of unconsciousness place patient stably in side position for

transportation. Take affected persons into fresh air and keep

them quiet.

Seek medical treatment.

After skin contact

Immediately wash with water and soap and rinse thoroughly. If skin

irritation continues, consult a doctor.

After eye contact Rinse opened eye for several minutes under running water. Then

consult a doctor.

After swallowing Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms

and effects, both acute

and delayedHeadache
Dizziness

Skin sensitization

Irritant to skin, eyes and respiratory system

4.3 Indication of any immediate medical attention and special

treatment needed After inhalation, even in the absence of signs of illness,

give inhaled Corticoid (e.g. Ventolair).

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, sand, extinguishing powder, foam **For safety reasons unsuitable extinguishing agents:** Water with full jet

5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO) Nitrogen oxides (NOx)

Vapours are heavier than air. Creeping vapours can result in inflammation at a distance.

5.3 Advice for firefighters:

Protective equipment

Wear fully protective suit.

Wear self-contained respiratory protective device.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation



Keep away from ignition sources.

Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment.

6.2 Environmental precautions

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in the case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up

Do not flush with water or aqueous cleansing agents

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7: Handling and storage

7.1 Precautions for safe handling

Cool down container when heated. Cool containers exposed to heat with water. Emergency cooling must be provided in the event of an ambient fire. Keep container tightly closed to prevent heat buildup (pressure increase). Avoid heat. Do not refill residue back into storage receptacles.

Ensure good interior ventilation in the workplace (fumes are heavier than air), at least 7-fold air changes per hour. Prevent formation of aerosols.

Information about fire - and explosion protection

Highly volatile, flammable constituents are released during processing.

Keep ignition sources away - Do not smoke. Fumes can combine with air to form an explosive mixture. Only explosion proof equipment. Protect against electrostatic charges. Protect from heat.

7.2 Conditions for safe storage, including any incompatibilities: Storage

Requirements to be met by storerooms and receptacles

Store only in the original receptacle. Store in a cool location.

Information about storage in one common storage facility

Store away from oxidising agents. Store away from foodstuffs.

Further information about storage conditions

Store in cool, dry conditions in well sealed receptacles.

Storage in a collecting room is required.

Store under lock and key and with access restricted to technical experts or their assistants only.

Max storage temperature 30°C.

Keep container tightly sealed.

Protect from heat and direct sunlight.

7.3 Specific end use(s)

Building coating or sealing.

Section 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:			
80-62-6- methyl methacrylate (≥10-<20%)			
WEL		Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm	
DNELs			
80-62-6 methyl methacrylate			
Inhalative	DNEL (worker)	210 mg/m³ (Long-term - local effects) 210 mg/m³ (Long-term - systemic effects) Long-term	
	DNEL (population)	74.3 mg/kg (Long-term - systemic effects) 105 mg/m³ (Long-term - local effects)	
103-11-7 2-ethylhexyl acrylate			
Dermal	DNEL	242 μg/cm² (Employee / Industrial / Commercial) Long term and short term	
Inhalative	DNEL	37.5 mg/m³ (Employee / Industrial / Commercial) (long term)	

80-62-6 methyl methacrylate

PNEC sediment 1.47 mg/kg dw (ground) 5.74 mg/kg dw (freshwater)

PNEC 0.094 mg/l (seawater)
0.94 mg/l (freshwater)

103-11-72 ethylhexyl acrylate

Ground 2.3 mg/l (Soil microorganisms)

1 mg/l (ground)

PNEC 0.0023 mg/kg (oral intake)
Water 0.126 mg/l (sediment)
0.002727 mg/l (freshwater)

Additional information about design of technical facilities

The lists valid during the making were used as a basis.

8.2. Exposure controls

Protective equipment







General protective and hygienic measures

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and food.

Do not inhale gases / fumes / aerosols.

Respiratory protection

Ensure good ventilation.

In case of brief exposure or low pollution use A1 type respiratory filter device. In case of intensive or longer exposure use self-

contained respiratory protective device A2.

Protection of hands

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Select glove material on consideration of the penetration times, rates of diffusion

and degradation.

Preventive skin protection by use of skin-protecting agents is recommended. After use of gloves apply skin-cleaning agents and

skin cosmetics.

Check protective gloves prior to each use for their proper condition. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Material of gloves The selection of suitable gloves does not only depend on the

material, but also on further marks of quality and varies

from manufacturer to manufacturer. As the product is a preparation of several substances the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior

to the application.

Protective gloves according to EN 374.

Suitable material: nitrile.

Penetration time of glove material Our recommendation is mainly for a one-time use as a short-term

protection for liquid splashes. For other applications, you

should contact a glove manufacturer.

The exact break through time must be found out from the manufacturer of the protective gloves and must be observed.

For permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material

are suitable Butyl rubber, BR

For permanent contact, gloves made of the following materials

are suitable Butyl rubber, BR

Not suitable are gloves made

of the following material Leather

Eye protection Tightly sealed goggles, EN-Standard: EN 166

Body protection Protective work clothing

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information:

Appearance

Form: Fluid

Colour:Various coloursOdour:Ester-likeOdour threshold:Not determinedpH-value:Not determined

Change in condition

Melting point / Freezing point: Not determined Initial boiling point & boiling 101°C (MMA)

range:

Flash point: 22 °C (DIN EN ISO 3680)

Flammability (solid, gas): N/A

Ignition temperature:252°C (2-EHA)Decomposition temperature:Not determinedSelf-ignition temperature:Not determined

Explosive properties: Product is not explosive. However, formation of explosive air /

vapour mixtures are possible. Not determined.

Explosion limits

Evaporation rate:

Lower: 1.65 Vol % (MMA)
Upper: 12.5 Vol % (MMA)
Vapour pressure at 20 °C: 38.7 hPa (MMA)
Density: Not determined

Solubility in / Miscibility with water: Not miscible or difficult to mix

Partition coefficient (n-octanol/water): log Pow: 4.29 (2-EHA); (25°C, OECD 107)

log Pow: 1.38 (MMA)

Not determined

Viscosity

Dynamic at 20 °C: 9000 mPas (EN ISO 2555)

Solvent content

Organic solvents 0.1% VOC (EC): 0.09% Solids content: 66.2%

9.2 Other information

No further relevant information available.

Section 10: Stability and reactivity

10.1 Reactivity See Section 10.2

10.2 Chemical stability

Thermal decomposition /

conditions to be avoidedNo decomposition if used according to specifications.

10.3 Possibility of hazardous reactions Exothermic reaction.

Reacts with peroxides and other radical forming substances. A hazardous polymerization may occur after the exhaustion

of the inhibitor.

10.4 Conditions to avoid Heat and direct sunlight.

10.5 Incompatible materials Reactions with peroxides and other free-radical generators.

10.6 Hazardous

decomposition productsNo dangerous decomposition when product used according

to specifications.

Additional information Emergency procedures will vary depending on individual

circumstances. The customer should have a contingency plan at

the workplace where the product is present.

Section 11: Toxicological information

11.1 Information on

toxicological effectsThere were no toxicological findings to the mixture.

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:			
ATE (Acute Toxicity Estimates)			
Inhalative	LC50/4h	>456 mg/l (rat)	
21645-51-2 aluminium hyd	Iroxide		
Oral	LD50 NOAEL	>2000 mg/kg (rat) 30 mg/kg (rat) chronic	
Inhalative	LC50 NOAEL	7.6 mg/l (rat) 70mg/m³ (rat)	
80-62-6 methyl methacrylate			
Oral Dermal Inhalative	LD50 NOAEL LC50 NOAEL LC50/4h	>5000 mg/kg (rat) (OECD 401) 2000 ppm (rat) n drinking water, 6-2000 ppm Findings: no toxic effects >5000 mg/kg (rabbit) 25 ppm (rat) 24 – 400 ppm Findings: damage to mucous membranes in the nose at 400 ppm 29.8 mg/l (rat)	
103-11-7 2-ethylhexyl acrylate			
Oral Dermal	LD50 LC50	4435 mg/kg (rat) (BASF Test) 7520 mg/kg (hare)	

Primary irritant effect

Skin corrosion/irritationCauses skin irritation and irritability.

Serious eye damage/irritation Based on available data, the classification criteria

are not met.

Respiratory or skin sensitization May cause an allergic skin reaction.

Other information

(about experimental toxicology): Due to the high vapour pressure a harmful concentration in the air is

quickly reached. At high concentrations a narcotic effect can occur.

Subacute to chronic toxicity Not tested.

Toxiokinetics, metabolism

and distribution The drug is metabolized rapidly (MMA)

Repeated dose toxicity No data available.

CMR effects (carcinogenicity, mutagenicity and toxicity

for reproduction) Not tested

Germ cell mutagenicity Based on available data, the classification criteria are not met.

CarcinogenicityBased on available data, the classification criteria are not met.Reproductive toxicityBased on available data, the classification criteria are not met.STOT-single exposureMay cause respiratory irritation.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazardBased on available data, the classification criteria are not met.

Section 12: Ecological information

12.1 Toxicity

80-62-6 methyl methacrylate		
EC3/16h	100 mg/l (Pseudomonas putida) (Cell proliferation inhibition test, Bringmann-Kuehn)	
Aquatic toxicity 80-62-6 methyl methacrylate		
EC50/48h LC50/96h ErC50/72h NOEC/72h EC50/72h NOEC	69 mg/l (daphnia magna) (OECD 202) >79 mg/l (Rainbow trout) (OECD 203) >110 mg/l (Pseudokirchneriella subcapitata) (OECD 201) >110 mg/l (Selenastrum capricornutum) (OECD 201) >110 mg/l (Selenastrum capricornutum) (OECD 201) >9.4 mg/l (Danio rerio) (OECD 210) Fish early life stage test, 35 days 37 mg/l (daphnia magna) (OECD 211) 21 days	
21645-51-2 aluminium hydroxide		
EC50 LC50	> 100 mg/l (daphnia magna) > 100 mg/l (Selenastrum capricornutum) > 100 mg/l (Salmo trutta)	
103-11-7 2-ethylhexyl acrylate		
Other (28d) EC50/48h (static) LC50/96h (static) NOEC/21d	>1000 mg/kg (Soil microorganisms) (OECD 217) The product has not been tested. The statement has been derived from products of a similar structure or composition. 1.3 mg/l (daphnia magna) (OECD 202, Part 1) 1.81 mg/l (Rainbow trout) (OECD 203) 0.19 mg/l (daphnia magna) The details of the toxic effect relates to the analytically determined concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.	
EC50/72h (static)	1.71 mg/l (scenedesmus subspicatus) (OECD 201) The details of the toxic effect relates to the analytically determined concentration	

12.2	Persistence and degradability	Nor further information available.
	Other information	The product is easily biodegradable.
12.3	Bioaccumulative potential	2-EHA: can be accumulated in organisms; biocaccumulation potential: Bioconcentration Factor 282.4 (Calculated).
12.4	Mobility in soil	MMA: A binding to the solid phase of soil, sediment and sewage sludge is not expected. From the water surface the substance is slowly evaporated into the atmosphere.
		2-EHA The product floats on water and does not dissolve. Absorption in soil is not likely.

Additional ecological information:

COD-value: 2-EHA Theoretical oxygen demand (TOD) = 5.6 g/g

BOD5-value 0.14 g/g (MMA)

General notes Water hazard class 1 (German Regulation) (Self-assessment):

slightly hazardous for water

Do not allow product to reach ground water, water course or

sewage system.

12.5 Results of PBT and vPvB assessment

PBT Does not meet the PBT-criteria of Annex XIII of REACH

(self assessment).

vPvBDoes not meet the vPvB-criteria of Annex XIII of REACH

(self assessment).

12.6 Other adverse effects No further relevant information available.

Section 13: Disposal considerations

13.1 Waste treatment methods

Hazardous waste according to Waste Catalogue (EWC). If recycling is not possible, waste must be in compliance with local regulations to be removed.

Recommendation

Uncured product residues are special waste.

Cured product residues are not hazardous waste.



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Waste disposal key:

The following Waste Codes of the European Waste Catalogue (EWC), are considered a recommendation.

The disposal must be coordinated with the local waste disposal company.

Liquid product:

080111 * paint and varnish containing organic solvents or other dangerous substances

080199 waste nec

Cured product residues:

080112 paint and varnish wastes other than those mentioned in 080111

080410 adhesive waste adhesives and sealants other than those mentioned in 080409

European waste catalogue 080111 * (recommended)

Uncleaned packaging:

Recommendation:

This material and its container must be disposed of as hazardous waste. Disposal must be made according to official regulations.

Section 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA UN1263

14.2 UN proper shipping name

ADR 1263 PAINT IMDG, IATA PAINT

14.3 Transport hazard class(es)
ADR



Class 3 (F1) Flammable liquids

Label 3

IMDG, IATA



Class 3 Flammable liquids

Label 3

14.4 Packing group

ADR, IMDG, IATA

14.5 Environmental hazards:

Marine pollutant No

14.6 Special precautions for user

Hazard identification number

(Kemler code)

EMS No. F-E, S-E **Stowage category** A

14.7 Transport in bulk according to

Annex II of Marpol and the IBC Code Not applicable.

Transport / Additional information:

ADR

Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30ml Maximum net quantity per inner packaging: 1000ml

Transport Category: 3
Tunnel restriction code

Remarks Classification according to viscosity clause (2.2.3.1.4)

Warning: Flammable liquids

> 450 litres Packing group II

IMDG

Limited quantities (LQ) 5L

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30ml Maximum net quantity per inner packaging: 1000ml

Remarks Classification according to viscosity clause (2.3.2.2) > 450 litres

Packing group II

UN "Model Regulation" UN 1263 PAINT, 3, III

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU

Named dangerous

substances - ANNEX INone of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes)

for the application of lower-tier

requirements 5000 t

Qualifying quantity (tonnes)

for the application of upper-tier

requirements 50,000 t

REGULATION (EC) No 1907/2006

ANNEX XVII Conditions

of restriction 3

National regulations:

Information about limitation of use:

Employment restrictions under the Maternity Protection Directive (94/33/EC).

Employment restrictions for Maternity Directive (92/85/EEC) for expectant and nursing mothers.

15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

Section 16: Other information

These figures relate to the product as delivered.

Sector of Use

Relevant identified uses of the mixture

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU19 Building and construction work

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

SU21 Consumer uses: Private households / general public / consumers

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H335 May cause respiratory irritation

H412 Harmful to aquatic life with long lasting effects

Training hints

Training about hazards and precautions must take place before the start of employment and at least annually thereafter.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Sens 1: Skin sensitization – Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment – long-term aquatic hazard – Category 3

Sources:

www.gestis.de

www.echa.eu

logkow.cisti.nrc.ca

Data compared to the previous version altered.

The information provided in this document is accurate to the best of our knowledge. The document does not constitute a specification and Axter takes no responsibility for the suitability of the product in a particular use. It is the user's responsibility to ensure that the product is suitable for the intended application and use and to take the necessary precautions to ensure that during handling, storage and installation of the product, all regulations to guarantee safety of people and the environment are observed. For further information or technical design assistance, contact Axter Ltd.