

Safety Data Sheet

according to 1907/2006/EC Article 31

STARCOAT PMMA SELF-LEVELLING MORTAR

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

1.1 Product identifier

Trade name: STARCOAT PMMA SELF-LEVELLING MORTAR

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

Application of the substance / the mixture Binder

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Axter Ltd

West Road

Ransomes Europark

Ipswich IP3 9SX

Tel: +44 1473 724056 (8.00 am to 5.30 pm – not 24 hours)

Email: info@axterltd.co.uk www.axter.co.uk

Emergency telephone number: +44 1473 724056 (8.00 am to 5.30 pm – not 24 hours).

In the event of a medical enquiry relating to this product, 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. 3 H226 Flammable liquid and vapour.



GHS07

Skin Irrit.2
Skin Sens.1
STOT SE 3H315 Causes skin irritation
H317 May cause an allergic skin reaction
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 regulations

Hazard pictograms

GHS02



GHS07

Signal word Warning**Hazard determining components of labelling:** Methyl methacrylate
2-ethylhexyl acrylate**Hazard statements**H226 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 in 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+P233	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).

vPvB: Does not meet the vPvB-criteria of Annex XIII of REACH (self assessment).

Section 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components:		
CAS: 80-62-6 EINECS: 201-297-1 Reg No. 01-2119452498-28-0000 Reg No. 01-2119452498-28-0025 Reg no. 01-2119452498-28-0028	methyl methacrylate Flam. Liq. 2, H225; Skin Irrit.2, H315; Skin Sens.1, H317; STOT SE 3, H335	25-50%
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-<25%

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

Section 4: First aid measures

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product. Take affected persons out of danger area and lie them 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 delayed

Headache

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 inhalatives 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 (NO_x)

These are heavier than air. Beware of spreading gases causing inflammation some distance away.

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. Keep unprotected persons away.

6.2 Environmental precautions:

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

Inform relevant authorities in 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 build up (pressure increase). Avoid heat.

Do not put remnants back into the storage vessels.
Provide good ventilation / extraction in the workplace.
Ensure at least 7-fold air changes per hour.
Prevent the use of aerosols.

Information about fire and explosion protection:

Highly volatile, flammable constituents are released during processing.
Keep ignition sources away from the product. Smoking is not permitted.
Fumes can combine with air to form an explosive mixture.
Use only explosion-proof equipment.
Protect against electro-static 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 oxidizing 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 restricted access for technical experts or their assistants only.
Maximum 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 (25-50%)		
WEL		Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm
DNELs		
80-62-6 methyl methacrylate		
Inhalative	DNEL (worker)	210 mg/m ³ (Long-term - local effects) 210 mg/m ³ (Long-term - systemic effects) Long-term
	DNEL (population)	74.3 mg/kg (Long-term - systemic effects) 105 mg/m ³ (Long-term - local effects)

103-11-7 2-ethylhexyl acrylate		
Dermal	DNEL	242 µg/cm ³ (Employee / Industrial / Commercial) Long term and short term
Inhalative	DNEL	37.5 mg/m ³ (Employee / Industrial / Commercial) (long term)

PNECs	
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)
103-11-7 2-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 (fresh water)

Additional information: Lists current at the time of compilation.

8.2 Exposure controls

Personal 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 respiratory filter device type A1 in air recycling independent breathing apparatus. In the case of higher concentrations or longer exposure use A2 self-contained respiratory protective device.

Protection of hands:



Protective gloves

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

Preventive skin protection by use of skin-protecting agents is recommended.

After wearing gloves apply skin-cleaning agents and skin cosmetics.

Check that protective gloves are in good condition prior to each use.

Due to lack of test data no recommendation for 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 against liquid splashes. For other applications, you should contact a glove manufacturer.

The exact breakthrough 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

Gloves made of the following material are not suitable: 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
Odour:	Ester-like
Odour threshold:	Not determined.
pH-value:	Not determined.

Change in condition

Initial Melting point/freezing point:	Undetermined.
Boiling point/Boiling range:	101 °C (MMA)
Flash point:	23°C (DIN EN ISO 3680)
Flammability (solid, gas):	Not applicable.
Ignition temperature:	252°C (2-EHA)
Auto-ignition temperature:	Product is not self-igniting

Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1.7 Vol % (MMA)
Upper:	12.5 Vol % (MMA)
Vapour pressure at 20 °C:	38.7 hPa (MMA)
Density at 20 °C:	1g/cm ³ (EN ISO 2811-1)
Evaporation rate	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)
Viscosity:	
Dynamic at 20 °C:	900 mPas (EN ISO 2555)
Solvent content:	
Organic solvents:	0.0%
VOC (EC)	0.04%
Solids content:	49.0%
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 avoided:
No 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** Avoid heat. Avoid direct sunlight.
- 10.5 Incompatible materials:** Reactions with peroxides and other free-radical generators.
- 10.6 Hazardous decomposition products:**
No 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 effects There 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	>324 mg/l (rat)
80-62-6 methyl methacrylate		
Oral	LD50	>5000 mg/kg (rat) (OECD 401)
	NOAEL	2000 ppm (rat) Drinking water, 6-2000 ppm Findings: no toxic effects
Dermal	LC50	>5000 mg/kg (rabbit)
	NOAEL	25 ppm (rat) 25- 400 ppm Findings: damage to mucous membranes in the nose at 400 ppm
Inhalative	LC50/4h	29.8 mg/l (rat)
103-11-7 2-ethylhexyl acrylate		
Oral	LD50	4435 mg/kg (rat) (BASF Test)
Dermal	LC50	7520 mg/kg (hare)

Primary irritant effect:

Skin corrosion/irritation Causes skin irritation.

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.

Toxicokinetics, 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.

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

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

STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based 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	69 mg/l (daphnia magna) (OECD 202)
LC50/96h	>79 mg/l (Rainbow trout) (OECD 203)
ErC50/72h	>110 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
NOEC/72h	>110 mg/l (Selenastrum capricornutum) (OECD 201)
EC50/72h	>110 mg/l (Selenastrum capricornutum) (OECD 201)
NOEC	9.4 mg/l (Danio rerio) (OECD 210) Fish early life stage test, 35 days 37 mg/l (daphnia magna) (OECD 211), 21 days
103-11-7 2-ethylhexyl acrylate	
Other (28d)	>1000 mg/kg (Soil micro-organisms) (OECD 217) The product has not been tested. The statement has been derived from products of a similar structure or composition.
EC50/48h (static)	1.3 mg/l (daphnia magna) (OECD 202, Part 1)
LC50/96h (static)	1.81 mg/l (Rainbow trout) (OECD 203)
NOEC/21d	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 relate to the analytically determined concentration.

12.2 Persistence and degradability Easily biodegradable.

Other information: The product is easily biodegradable.

12.3 Bioaccumulative potential

2-EHA: can be accumulated in organisms; bioaccumulation 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. Where the substance gets into the environment it should remain in the compartment into which it has leaked.

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).

vPvB: Does 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 (EW C). If recycling is not possible, waste must be removed in compliance with local regulations.

Recommendation

Uncured product residues are special waste. Cured product residues are not hazardous waste.



Must not be disposed of with household waste. 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. Disposal must be organised with a 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, ADN, IMDG

Void

IATA

UN1263

14.2 UN proper shipping name

ADR, ADN, IMDG

Void

IATA

PAINT

14.3 Transport hazard class(es)

ADR, ADN, IMDG

Class

Void

IATA



Class

3 flammable liquids

Label

3

14.4	Packing group	
	ADR, IMDG	Void
	IATA	III
14.5	Environmental hazards:	
	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	Not applicable
	Transport / Additional information:	
	ADR	Classification according to viscosity clause (2.2.3.1.5) > 450 l:3 F1, III (2.2.3.1.5)
	Remarks:	
	IMDG	Classification according to viscosity clause (2.3.2.5) > 30 l:3, III (2.3.2.5)
	Remarks:	
	UN "Model Regulation"	Void

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 I None 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

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

Instruction on handling and precautions must be given prior to use 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
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Skins 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.