

Safety Data Sheet

STARCOAT PMMA W PRIMER (Component A)

according to 1907/2006/EC Article 31

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

1.1 Product identifier

Trade name: STARCOAT PMMA W PRIMER (resin)

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

Application of the substance / the mixture Priming

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Axter Ltd
West Road
Ransomes Europark
Ipswich IP3 9SX

t +44 1473 724056
e info@axterltd.co.uk
www.axter.co.uk

Emergency telephone number:

+44 7764 146926 or +44 7887 535789 or +44 7725 940 678

*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



Signal word Danger

Hazard determining components of labelling:

Methyl methacrylate
Benzyl methacrylate

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).

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 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	50-100%
CAS: 99-97-8 EINECS:202-805-4	N,N-dimethyl-p-toluidine Acute Tox 3, H301; Acute Tox 3, H311; Acute Tox 3, H331; STOT RE 2, H373, Aquatic Chronic 3, H412	≤2.5%
CAS: 2495-37-6 EINECS:219-674-4 Reg no. 01-2119960155-39-0000	Benzyl methacrylate Skin Irrit.2, H315; Eye Irrit. 2, H319; Skin Sens.1, H317; STOT SE 3, H335	≥0.1-<1%
CAS: 38668-48-3 EINECS:254-075-1	1,1'-(p-tolylimino)dipropan-2-ol Acute Tox. 2, H300; Eye Dam. 1, H318; Aquatic Chronic 3, H412	<1%

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 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 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 disease, give inhaled corticosteroid (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. Crawling vapours can travel some distance from the source of ignition.

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

Dilute with plenty of water.

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 container if it becomes warm. Cool containers exposed to heat with water. Emergency cooling must be available in the case of a fire nearby. Keep containers closed to protect against heat build up (pressure rise). Avoid heat.

Do not refill residue into storage receptacles.

Ensure good ventilation/exhaustion at the workplace (at least 7 air changes)

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.

All equipment to be explosion-proof.

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 (50-100%)

WEL

Short-term value: 416 mg/m³, 100 ppm
Long-term value: 208 mg/m³, 50 ppm

DNELs				
80-62-6 methyl methacrylate			2495-37-6 benzyl methacrylate	
Inhalative	DNEL (worker)	2.10 mg/m ³ (Long-term - local effects) 2.10 mg/m ³ (Long-term - systemic effects) Long-term	DNEL (worker)	6.94 mg/m ³ (long-term-systemic effect)
	DNEL (population)	74.3 mg/m ³ (Long-term - systemic effects) 105 mg/m ³ (Long-term - local effects)	DNEL (worker)	24.2 mg/m ³ (long-term-systemic effects)
PNECs				
80-62-6 methyl methacrylate			2495-37-6 benzyl methacrylate	
PNEC (sediment)		1.47 mg/kg dw (ground) 5.74 mg/kg dw (freshwater)	PNEC	
PNEC		0.094 mg/l (seawater) 0.94 mg/l (freshwater)		0.00216 mg/l (seawater)

Additional information: The lists valid at the time were used as the basis for this information.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and food.

Respiratory protection:

Ensure good ventilation.

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

Protection of hands:



Protective gloves

Glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Select glove material taking into consideration 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 that protective gloves are in good condition prior to each use.

Due to lack of test data, no recommendation regarding 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 once-only use as a short-term protection against 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:	Colourless
Odour:	Ester-like
Odour threshold:	Not determined.
pH-value:	Not determined.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	101 °C (MMA)
Flash point:	10 °C (MMA)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	430 °C (MMA)
Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures is possible.
Explosion limits:	
Lower:	1.7 Vol % (MMA)
Upper:	12.5 Vol % (MMA)

Vapour pressure at 20 °C:	38.7 hPa (MMA)
Density:	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient (n-octanol/water):	log Pow: 1.38 (MMA)
Viscosity:	
Dynamic at 20 °C:	500 mPas (EN ISO 2555)
Solvent content:	
VOC (EC)	0.0%
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: Heat and direct sunlight.

10.5 Incompatible materials: Violent reaction with peroxides and other reducing agents.

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)

Oral	LD50	>2488 -<18,018 mg/kg (rat)
Dermal	LD50	30,303 mg/kg
Inhalative	LC50/4h	141 mg/l (rat)

80-62-6 methyl methacrylate		
Oral	LD50 NOAEL	>5000 mg/kg (rat) (OECD 401) 2000 ppm (rat) n drinking water, 6-2000ppm Findings: no toxic effects
Dermal Inhalative	LC50 NOAEL LC50/4h	>5000 mg/kg (rabbit) 25 ppm (rat) 25-400 ppm Findings: damage to mucous membranes in the nose at 400 ppm 29.8 mg/l (rat)
99-97-8 N,N -dimethyl-p-toluidine		
Oral Dermal Inhalative	LD50 LD50 LC50/4h	1650 mg/kg (rat) 300 mg/kg (ATE) 1.4 mg/l (rat)
2495-37-6 benzyl methacrylate		
Oral	LD50	~5000 mg/kg (rat) (OECD 401)
38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol		
Oral	LD50	>25-<200 mg/kg (rat) (OECD 423)

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)
(static)	Fish early life stage test, 35 days 37 mg/l (daphnia magna) (OECD 211) 21 days
99-97-8 N,N –dimethyl-p-toluidine	
LC50/96h	52 mg/l (piscis)
2495-37-6 benzyl methacrylate	
LC50/48h	4.67 mg/l (fish)
38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol	
LC50/48h	220 mg/l (daphnia magna)
EC50/48h	28.8 mg/l (daphnia magna)
LC50/96h	17 mg/l (Brachydanio rerio)

12.2 Persistence and degradability Easily biodegradable
Other information: the product is easily biodegradable

12.3 Bioaccumulative potential No further relevant information available.

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.

Additional ecological information:

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 (EWC). If recycling is not possible, waste must be removed in compliance with local regulations.

Recommendation



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:

080409 * adhesives and sealants containing organic solvents or other dangerous substances

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

Cured product residues:

170 203

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.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

*Section 14: Transport information

14.1 UN-Number	ADR, IMDG, IATA	UN1263
14.2 UN proper shipping name	ADR	1263 PAINT, special provision 640D
	IMDG, IATA	PAINT
14.3 Transport hazard class(es)	ADR, IMDG, IATA	
	Class	3 Flammable liquids.
	Label	3
14.4 Packing group	ADR, IMDG, IATA	II
14.5 Environmental hazards:		
	Marine pollutant:	No

14.6 Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler):	33
EMS Number:	F-E,S-E
Stowage Category	B
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:	E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
Transport category	2
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ) Excepted quantities (EQ) Code:	5L E2
UN "Model Regulation":	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml UN 1263 PAINT, SPECIAL PROVISION 640D,3,II

*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 lower-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

H300 Fatal if swallowed

H301 Toxic if swallowed

H311 Toxic if in contact with skin

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H318 Causes serious eye damage

H319 Causes serious eye irritation

H331 Toxic if inhaled

H335 May cause respiratory irritation

H350 May cause cancer

H373 May cause damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects

Training hints

Instruction on handling and precautions must take place before 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

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

Acute tox. 2 – Acute toxicity – Category 2

Acute tox. 3 – Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skins Sens 1: Skin sensitization – Category 1

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

STOT RE 2: Specific target organ toxicity - repeated exposure, Category 2

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.