

Safety Data Sheet

according to 1907/2006/EC, Article 31

STARCOAT PMMA R PRIMER

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

1.1 Product identifier

Trade name: STARCOAT PMMA R PRIMER

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 (8.00 am to 5.30 pm, Monday to Friday)

e info@axterltd.co.uk ; www.axter.co.uk

Emergency telephone number:

+44 (0) 1473 724056, 8.00 am to 5.30 pm, Monday to Friday - not 24 hours. In the event of a medical enquiry regarding this product, contact your doctor or local hospital accident & 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 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye 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
Bisphenol-A-epichlorohydrin
2-ethylhexyl acrylate
Neopentylglycol propoxylated diacrylate

Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long-lasting effects
H412 Harmful to aquatic life with long-lasting effects

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours.
P280	Wear protective gloves/ eye protection.
P312	Call a POISON CENTRE/ doctor if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

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 01-2119452498-28-0026	methyl methacrylate	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens.1, H317; STOT SE 3, H335	25-50%
CAS:25068-38-6 NLP: 500-033-5	Bisphenol-A-epichlorohydrin	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1 H317; Aquatic Chronic 2, H411	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	≥2.5-<10%
CAS: 84170-74-1	Neopentylglycol propoxylated diacrylate	Aquatic Chronic 2, H411; Skin Sens. 1B, H317	0.25-<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 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

On inhaling, even if there is no sign of illness, give corticosteroid inhalatives (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)
Vapours are heavier than air.
Crawling vapours can ignite 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. Keep unprotected persons away.

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 ambient fire. Keep containers tightly closed to prevent heat build up (pressure increase). Avoid heat.

Do not refill residue into storage receptacles.

Ensure good ventilation/exhaustion at the workplace. 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 (25-50%)

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/m ³ (Long-term - local effects) 210 mg/m ³ (Long-term - systemic effects) Long term
	DNEL (population)	74.3 mg/m ³ (Long-term - systemic effects) 105 mg/m ³ (Long-term - local effects)
103-11-72 ethylhexyl acrylate		
Dermal	DNEL	242 µg/cm ² (Employee / Industrial / Commercial) Long-term and short-term
Inhalative	DNEL	37.5 mg/m ³ (Employee / Industrial / Commercial)
84170-74-1 Neopentylglycol propoxylated diacrylate		
Dermal	DNEL (worker)	3.33 mg/kg bw/day (Long-term – systemic effects)
	DNEL (worker)	0.177 mg/m ³ (Employee / Industrial / Commercial)
Inhalative	DNEL (worker)	11.75 mg/m ³ (Long-term - systemic effects)

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)
103-11-72 ethylhexyl acrylate	
Ground	2.3 mg/l (Soil microorganisms) 1 mg/l (ground)
PNEC Water	0.0023 mg/kg (oral intake) 0.126 mg/l (sediment) 0.002727 mg/l (freshwater)

Additional information: The lists valid during the making were used as basis.

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 feed.
- Do not inhale gases/ fumes/ aerosols.

Respiratory protection:

- Ensure good ventilation.
- In the case of brief exposure or low pollution, use respiratory filter device (A1). In the case of intensive or longer exposure, use self-contained respiratory protective device (A2).

Protection of hands:

Protective gloves

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 use.

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

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.

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:	22°C (DIN EN ISO 3680)
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 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:	1.03 g/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:	600 mPas (EN ISO 2555)
Solvent content:	
Organic solvents:	0.0 %
VOC (EC)	0.00 %
Solids content:	56.0 %

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: Reactions with peroxides and other free-radical generators.

10.6 Hazardous decomposition products:

No dangerous decomposition products 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:		
80-62-6 methyl methacrylate		
Oral	LD50 NOAEL	> 5000 mg/kg (rat) (OECD 401) 2000 ppm (rat) In drinking water, 6-2000 ppm 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)
25068-38-6 Bisphenol-A-epichlorohydrin		
Oral	LD50	>5000 mg/kg (rat)
103-11-7 2-ethylhexyl acrylate		
Oral Dermal	LD50 LC50	4435 mg/kg (rat) (BASF-Test) 7520 mg/kg (hare)
84107-74-1 Neopentylglycol propoxylated diacrylate		
Dermal	LD50	>2000 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation Causes serious eye irritation.

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, Bringamm-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)
EC50/72h	> 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
25068-38-6 Bisphenol-A-epichlorohydrin	
EC50/48h (static)	1.7 mg/l (daphnia magna) (OECD 202, Acute Immobilisation Test)
LC50/96h (static)	1.5 mg/l (fish) (OECD 203, Acute Toxicity Test)
NOEC/21d	0.3 mg/l (daphnia magna) (OECD 211, Reproduction Test)
EC50/72h (static)	9.4 mg/l (Alge (Desmodesmus subspicatus))
103-11-7 2-ethylhexyl acrylate	
Other (28d)	> 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.
EC50/48h (static)	1.3 mg/l (daphnia magna) (OECD 202, Part 1)
LC50/96h (static)	1.8 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 products have 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.
84170-74-1 Neopentylglycol propoxylated diacrylate	
EC50/48h	37 mg/l (daphia magna)
LC50/96h	2.7 mg/l (Brachydanio rerio)
NOEC/72h	1 mg/l (Pseudokirchneriella subcapitata)
EC50/72h	3.4 mg/l (alga)
NOEC	25.3 mg/l (daphnia magna) (48h)

12.2 Persistence and degradability 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 2 (German Regulation) (Self-assessment): hazardous for water
 Danger to drinking water if even small quantities leak into the ground.

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 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 rubbish. 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, IMDG, IATA**

Class 3 Flammable liquids.
Label 3

**14.4 Packing group
ADR, IMDG, IATA**

III

**14.5 Environmental hazards:
Marine pollutant:**

No

**14.6 Special precautions for user
Danger code (Kemler):**

Warning: Flammable liquids.

EMS Number:

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: 30 ml

Maximum net quantity per outer packaging: 1000 ml

Transport category

3

Tunnel restriction code

E

Remarks:Classification according to viscosity clause
(2.2.3.1.4)**IMDG****Limited quantities (LQ)****Excepted quantities (EQ)**

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

Remarks:**UN "Model Regulation":**

Classification according to viscosity clause (2.3.2.3)

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 I** None of the ingredients is listed.**Seveso category** P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5000t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50000t

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.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Training hints

Instruction about hazards and precautions must take place before employment of the product 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

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

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 2

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

Aquatic Chronic 2: Hazardous to the aquatic environment – long-term aquatic hazard – 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.

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