

Safety Data Sheet

According to 1907/2006/EC, Article 31

STARCOAT PMMA M SPRAY PRIMER

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

1.1 Product identifier

Trade name: STARCOAT PMMA M SPRAY 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

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

Aerosol 1

 H222-H229 Extremely flammable aerosol. Pressurised container.
 May burst if heated.


GHS08 health hazard

STOT RE 2

 H373 May cause damage to organs through prolonged
 or repeated exposure


GHS09 environment

Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects



GHS07

 Skin Irrit. 2
 Eye Irrit. 2

 H315 Causes skin irritation.
 H319 Causes serious eye 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



GHS08



GHS07



GHS09

Signal word

Danger

Hazard-determining components of labelling:

xylene

Hazard statements

H222-H229	Extremely flammable aerosol. Pressurised container. May burst if heated.
H315	Causes skin irritation
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long-lasting effects

Precautionary statements

P101	If medical advice is needed, have product container or label to hand.
P102	Keep out of reach of children
P103	Read label before use
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition surfaces. - No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/ eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F

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

3.1 Mixtures

Description

Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 115-10-6 EINECS: 204-065-8 Reg Nr. 01-2119472128-37	Dimethyl ether Flam. Gas 1, H220; Press. Gas C, H280	50-100%
CAS: 1330-20-7 EINECS: 215-535-7 Reg Nr. 01-2119488216-32	Xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≥10-<20%
CAS: 7779-90-0 EINECS: 231-944-3 Reg Nr. 02-2119485044-40	trizinc bis(orthophosphate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	2.5-10%
CAS: 100-41-4 EINECS: 202-849-4 Reg Nr. 01-2119489370-35	Ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	≥2.5-<10%
CAS: 1314-13-2 EINECS: 215-222-5 Reg Nr. 01-211963881-32	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≥0.25-<2.5%

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. If symptoms or in all cases of doubt, see a doctor.

Never give anything by mouth to an unconscious person. If unconscious, place in a stable lateral position and seek medical advice.

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

Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. DO NOT use solvents or thinners.

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

Exposure to solvent vapours above the workplace exposure limit may result in adverse health effects such as irritation of the mucous membranes and respiratory system and damage to the liver, kidneys and the central nervous system.

Signs include headache, dizziness, fatigue, muscle weakness, drowsiness, and unconsciousness in severe cases.

Solvents may cause some of the above effects on absorption through the skin. Repeated or prolonged contact with the mixture may cause the withdrawal of the natural fat from the skin and result in non-allergic contact dermatitis as well as absorption through the skin.

Splashes in the eyes can cause irritation and reversible damage.

Ingestion can cause nausea, diarrhea and vomiting.

This takes into account, if known, delayed and immediate effects as well as chronic effects of the components, through short-term and long-term exposure via oral, inhalation and dermal routes of exposure and eye contact.

Irritant to skin, eyes and respiratory system

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

Section 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Extremely flammable aerosol. When entering the sewage system, there is a risk of fire and explosion. In the event of heating or fire, pressure will rise and the container may burst, creating a risk of explosion.

Gas may accumulate in low or enclosed areas or spread very far to an ignition source, causing a flashback with a fire or explosion. In case of fire, bursting aerosol vessels can fly around at great speed. This material is toxic to aquatic life and has long-term effects. Extinguishing water contaminated with this substance must be contained and must not be allowed to enter waters, drains or runoff.

5.3 Advice for firefighters:**Protective equipment**

Special precautions for firefighters:

In case of fire immediately lock the scene and evacuate all persons from the danger zone. No action should be taken that is associated with personal risk or has not been sufficiently trained. This material is toxic to aquatic life and has long-term effects. Extinguishing water contaminated with this substance must be contained and must not be allowed to enter waters, drains or runoff.

Wear respiratory protective device.

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

Additional information

Container is under pressure. Protect from sunlight and temperatures above 50°C. Do not crack open or set fire to after using. Do not puncture the container, burn it or store it at temperatures above 49°C (120°F) or in direct sunlight. Danger of bursting of container when exposed to fire or when heated. In case of fire, bursting aerosol vessels can fly around at great speed.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No action should be taken that is associated with personal risk or has not been sufficiently trained. Evacuate environment. Unnecessary and unprotected personnel deny access. If the aerosol canister is damaged, beware of rapidly escaping, pressurized contents and propellant. If a large number of containers break as a bulk material accident, follow the instructions in the section on cleaning procedures. Do not touch or enter spilled substance. Switch off all sources of ignition. No sparks, no smoking and no flames in the danger area. Avoid inhalation of vapour or mist. Ensure adequate ventilation. In case of insufficient ventilation wear respiratory protection. Put on appropriate personal protective equipment. Wear protective equipment. Keep unprotected persons away

6.2 Environmental precautions

Do not allow to enter sewers/ surface or ground water. Avoid spreading and draining of released material and contact with soil, water, drains and sewers. Inform the competent authorities if the product has caused environmental pollution (sewage systems, surface waters, soil or air). Fabric is water polluting. May be harmful to the environment if released in large quantities. Record spilled quantities.

6.3 Methods and material for containment and cleaning up

Small amount released:

Eliminate leaks if possible without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and wipe up if water soluble. Alternatively, or if water insoluble, absorb with an inert dry material and place in a suitable waste container. Dispose of through a recognized waste disposal company.

Large released amount:

Eliminate leaks if possible without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release with the wind. Avoid entering sewers, bodies of water, cellars or closed areas. Rinse spilled material in a wastewater treatment plant or proceed as follows. Contain escaped material with non-combustible absorbent (eg sand, earth, vermiculite, diatomaceous earth) and place in a suitable container for disposal according to local regulations. Dispose of through a recognized waste disposal company. Contaminated absorbents can be just as dangerous as the released material.

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

Avoid the formation of flammable and explosive solvent vapours in the air and exceed the workplace limits. Use the product only in places where there is no open flame and other sources of ignition. Protect electrical equipment according to appropriate standards.

Mixture may become electrostatically charged: Always use grounding when transferring from one container to another.

Workers should wear antistatic footwear and clothing, and the floors should be conductive.

Avoid contact with eyes and skin. Avoid inhalation of dust, particles, spray or mist resulting from the use of this mixture.

Do not inhale the grinding dust.

Eating, drinking and smoking should be prohibited in areas where this substance is used, stored or processed.

Never empty with pressure. Container is not a pressure vessel.

Always store in containers made of the same material as the original container.

Follow legal protection and safety regulations.

Open and handle receptacle with care.

Information about fire - and explosion protection

Do not spray onto a naked flame or any incandescent material.

Use explosion-proof apparatus / fittings and spark-proof tools.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

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.

Do not store together with alkalis (caustic solutions).

Do not store together with acids.

Further information about storage conditions

Store in cool, dry conditions in well sealed receptacles.

Max storage temperature 30°C.

Keep container tightly sealed.

Do not seal receptacle gas tight.

7.3 Specific end use(s)

No further relevant information available.

Section 8: Exposure controls/personal protection

Additional information about design of technical facilities

The information in this section contains general advice and guidance. Information provided is based on typical expected uses of the product. When handling bulk or other uses that can significantly increase worker exposure or release into the environment, additional measures may be required.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace

If this product contains ingredients with exposure limits, personal, atmospheric (workplace) or biological monitoring may be required to determine the effectiveness of ventilation or other control measures and / or the need to use respiratory protective equipment. Reference should be made to verification standards, such as the following: European Standard DIN EN 689 (Workplace atmospheres - Guidance for the determination of inhalative exposure to chemical substances for comparison with limit values and measurement strategy) European Standard DIN EN 14042 (Workplace atmospheres - Guidance for use and performance) the use of procedures and equipment for the determination of chemical and biological agents) European Standard DIN EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances is also required.

115-10-6 dimethyl ether (50-100%)	
WEL	Short-term value: 958 mg/m ³ , 500 ppm Long-term value: 766 mg/m ³ , 400 ppm
1330-20-7 xylene (≥10-<20%)	
WEL	Short-term value: 441 mg/m ³ , 100ppm Long-term value: 220 mg/m ³ , 50ppm Sk; BMGV
100-41-4 ethylbenzene (≥2.5-<10%)	
WEL	Short-term value: 552 mg/m ³ , 125ppm Long-term value: 441 mg/m ³ , 100ppm Sk

Ingredients with biological limit values:	
1330-20-7 xylene (≥10-<20%)	
BMGV	650mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

Additional information

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

Respiratory protection

Ensure good ventilation.
In interiors and where inhalation levels exceed limits: Filter type A1 using an air recycling independent breathing apparatus at high concentrations, A2 at an intensive or longer outline.

Protection of hands

Protective gloves
There is no single glove material or combination of materials that can give unlimited resistance to individual chemicals or combinations of chemicals. The breakthrough time must be greater than the useful life of the product. The instructions and information provided by the glove manufacturer regarding use, storage, maintenance and replacement must be followed.
Gloves must be replaced regularly and at all signs of damage to the glove material. Always ensure that the gloves are faultless and stored and used correctly. The performance or effectiveness of the gloves may be reduced by physical and chemical damage and poor maintenance. Use skin protection cream suitable for all uncovered body parts. Do not use after exposure has occurred.

Material of gloves

Protective gloves according to EN 374. Suitable material: Nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.5 mm.

Penetration time of glove material

>480 minutes (permeation level 6)

Not suitable are gloves made of the following material

Leather

Eye protection:

Tightly sealed goggles, EN-Standard: EN 166

Body protection

Before handling this product, personal protective equipment should be selected on the basis of the task to be performed and the risks involved, and approved by a specialist. If there is a risk of ignition from static electricity, antistatic protective clothing must be worn. For maximum protection against static discharge, clothing should include antistatic coveralls, boots and gloves. See European Standard DIN EN 1149 for more information on the material and design layouts and test methods.

Recommended: wear overalls or long-sleeved shirt (EN 1149-1).

**Limitation and supervision
of exposure into the environment**

Emissions from ventilation and process equipment should be checked to ensure that they comply with the requirements of environmental legislation. In some cases, fume scrubbers, filters or technical modifications to the process equipment will be required to reduce emissions to acceptable levels.

Section 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information:****Appearance**

Form:	Liquid (aerosol)
Colour:	Various colours
Odour:	By hydrocarbons
Odour threshold:	Not determined
pH-value:	Undetermined

Changing condition

Melting /Freezing point: Not determined

Initial boiling point & range: Not applicable, aerosol

Flash point: -40°C

Flammability (solid, gaseous): Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Ignition temperature: Low flammability in the presence of the following materials and conditions: shocks and mechanical effects.

Auto-ignition temperature: In use, formation of explosive / highly flammable vapour / air mixtures possible. The vapours can travel an extraordinary distance and ignite explosively at an ignition source.

235 °C

350 °C

High explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and vibration and mechanical effects.

Container is under pressure. Protect from sunlight and temperatures above 50 °C. Do not crack open or set fire to after using.

Do not puncture the container, burn it or store it at temperatures above 49 °C (120°F) or in direct sunlight. Danger of bursting of container when exposed to fire or when heated. In case of fire, bursting aerosol vessels can fly around at great speed.

Explosion limits

Lower: 3 Vol %

Upper: 18.6 Vol %

Vapour pressure at 20 °C: 4,200 hPa

Density at 20 °C: 0.86 g/cm³ (EN ISO 2811-1)

Vapour density at 20 °C: >1 [Air = 1] g/ cm³

Evaporation rate: N/A

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

Partition coefficient (n-octanol/water): Not determined

Viscosity

Dynamic: Not determined

Solvent content

Organic solvents

72.8% including propellant weight percent.

VOC (EC):

72.80%

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

Stable under the recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

May form dangerous decomposition products when exposed to high temperatures.

10.5 Incompatible materials

Keep away from the following materials to avoid strong exothermic reactions: oxidizing agents, strong alkalis and strong acids.

10.6 Hazardous decomposition products

No dangerous decomposition when product used according to specifications. When exposed to fire, toxic gases, even CO, CO₂ and smoke can be generated.

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)

Dermal	LD50	>9,214 mg/kg
Inhalative	LC50/4h	24.8 mg/l

115-10-6 dimethyl ether

Inhalative	LC50/4h	308 mg/l (rat)
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1330-20-7 xylene		
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>1700 mg/kg (rabbit)
	LC50	>2000 mg/kg (hare)
Inhalative	LC50/4h	5 mg/l (rat)
7779-90-0 trizinc bis(orthophosphate)		
Oral	LD50	>5000 mg/kg (rat)
100-41-4 ethylbenzene		
Dermal	LD50	5000 mg/kg (hare)
Inhalative	LC50/4h	11 mg/l (ATE)
1314-13-2 zinc oxide		
Oral	LD50	>5000 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 damage to organs through prolonged or repeated exposure if inhaled.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**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

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

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure

Aspiration hazard

Xylene (mixture of isomers) ASPIRATION HAZARD – Category 1, ethylbenzene ASPIRATION HAZARD – Category 1

Section 12: Ecological information**12.1 Toxicity**

Aquatic toxicity 1330-20-7 xylene	
LC/EC/IC50	1 mg/l (aquatic organisms)
EC50/48h	1-10mg/l (daphnia magna)
LC50/96h	2 mg/l (fish)
100-41-4 ethyl benzene	
EC0	~160mg/l (alga) ~120 mg/l (daphnia magna)

12.2 Persistence and degradability

No further relevant information available.


12.3	Bioaccumulative potential	No further relevant information available.
12.4	Mobility in soil	No further relevant information available.
	Ecotoxical effects:	
	Remark	Toxic to aquatic life with long lasting effects. Toxic for fish.
	Additional ecological information:	
	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. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms.
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.
	Unclean Packaging Recommendation	Disposal must be made according to official regulations.

European Waste Catalogue	
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	Separately collected fractions (Except 15 01)
20 01 27	Paint, inks, adhesives and resins containing hazardous substances

Section 14: Transport information

14.1	UN-Number	UN1950
	ADR, IMDG, IATA	
14.2	UN proper shipping name	1950 AEROSOLS
	ADR	AEROSOLS (trizinc bis(orthophosphate), zinc oxide)
	IMDG	MARINE POLLUTANT
	IATA	AEROSOLS, flammable
14.3	Transport hazard class(es)	
	ADR	
		
	Class	2 5F Gases
	Label	2.1

IMDG
Class
Label

 2.1
 2.1
IATA
Class
Label

 2.1
 2.1

14.4 Packing group
ADR, IMDG, IATA

Void

14.5 Environmental hazards:
Marine pollutant

Symbol (fish and tree)

14.6 Special precautions for user
Hazard identification number
(Kemler code)
EMS No.
Stowage code

Warning: Gases.

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F-D, S-U

SW1 Protected from sources of heat

SW2 Clear of living quarters

Segregation code
 SG69 For AEROSOLS with maximum capacity of 1 litre:
 Segregation as for class 9. Stow 'separated from' class 1 except for
 division 1.4.

For AEROSOLS with a capacity above 1 litre:

Segregation as for the appropriate subdivision of class 2.

For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of class 2.

14.7 Transport in bulk according
to Annex II of Marpol and
the IBC Code

Not applicable.

Transport/Additional information:
ADR
Limited quantities (LQ)

1L

Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

Transport Category

2

Tunnel restriction code

D

IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
UN "Model Regulation"	UN 1950 AEROSOLS, 2.1

Section 15: Regulatory information

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

Named dangerous substances - ANNEX I	None of the ingredients is listed.
Seveso category	P3a FLAMMABLE AEROSOLS, E2 Hazardous to the Aquatic Environment
Qualifying quantity (tonnes) for the application of lower-tier requirements	150 t
Qualifying quantity (tonnes) for the application of upper-tier requirements	500 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.
Other regulations, limitations and prohibitive regulations	Ordinance on prohibitions and restrictions on the placing on the market of dangerous substances, preparations and articles under the Chemicals Act (Chemicals Prohibition Ordinance – ChemVerbotsV) Technical Rules for Hazardous Substances: Occupation Exposure Limits (TRGS 9000) Technical Rules for Hazardous Substances: List of carcinogenic, mutagenic or reproductive toxicants (TRGS 905)

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.

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

H220	Extremely flammable gas
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways

H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Training hints

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

Abbreviations and acronyms:

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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 vPvB: very Persistent and very Bioaccumulative
 Flam. Gas 1: Flammable gases – Category 1
 Aerosol 1: Aerosols – Category 1
 Press. Gas C: Gasses under pressure – Compressed gas
 Flam. Liq. 2: Flammable liquids, Hazard Category 2
 Flam. Liq. 3: Flammable liquids, Hazard Category 3
 Acute Tox., 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
 STOT RE 2: Specific target organ toxicity – Repeated exposure – Category 2
 Asp. Tox. 1: Aspiration hazard – Category 1
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment – long term aquatic hazard – Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment – long term aquatic hazard – Category 2

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.