

Safety data sheet

Supplied by:
Sil-Mid Limited
Roman Park, Roman Way
Coleshill, West Midlands
B46 1HG, UK
T: 01675 432850
E: info@silmid.com

Emergency Telephone No. +44 (0)1675 432850
(Monday to Friday, 08:00 – 17:30 – GMT)

Page: 1/14

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

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

1.1. Product identifier

Ardrox 185L

UFI: 3DM1-F1MG-F00X-58VY

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Detergents

Not recommended use: Uses other than recommended

1.3. Details of the supplier of the safety data sheet

Company:
Chemetall Ltd.
Napier House, Auckland Park
Bletchley, MK1 1BU
Great Britain
+44 1908 649333
sds.global-chemetall@basf.com

1.4. Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

According to Regulation (EC) No 1272/2008 [CLP]

Skin Corr./Irrit. 1A	H314 Causes severe skin burns and eye damage.
Eye Dam./Irrit. 1	H318 Causes serious eye damage.
Met. Corr. 1	H290 May be corrosive to metals.

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:

Danger

Hazard Statement:

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P260	Do not breathe dust or mist.
P234	Keep only in original packaging.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P303 + P361 + P353	IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.

Precautionary Statements (Storage):

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

sodium hydroxide

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: sodium hydroxide

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

organic compounds, inorganic base, Water

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

sodium hydroxide

Content (W/W): $\geq 25\%$ - $< 30\%$	Met. Corr. 1
CAS Number: 1310-73-2	Skin Corr./Irrit. 1A
EC-Number: 215-185-5	Eye Dam./Irrit. 1
REACH registration number: 01-2119457892-27	H290, H314
INDEX-Number: 011-002-00-6	<u>Specific concentration limit:</u>
	Skin Corr./Irrit. 1A: $\geq 5\%$
	Skin Corr./Irrit. 1B: $2 - < 5\%$
	Skin Corr./Irrit. 2: $0.5 - < 2\%$
	Eye Dam./Irrit. 2: $0.5 - < 2\%$

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Remove affected person from danger area. Keep warm, calm and covered up. Immediately remove contaminated clothing. Never give anything by mouth to an unconscious person. In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product. Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.

If inhaled:

Immediate medical attention required. Remove the affected individual into fresh air and keep the person calm. If breathing is irregular or stopped, administer artificial respiration.

On skin contact:

Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary. Immediate medical attention required.

On contact with eyes:

Remove contact lenses, if present. Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Immediate medical attention required.

On ingestion:

Summon medical aid without delay. Do not induce vomiting due to aspiration hazard. Rinse mouth immediately with water. Keep at rest.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: skin corrosion, Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Hazards: May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, alcohol-resistant foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

water jet

5.2. Special hazards arising from the substance or mixture

Advice: Fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

5.3. Advice for fire-fighters

Special protective equipment:

Appropriate breathing apparatus may be required.

Further information:

Cool closed containers in the vicinity of the source of fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours. For non-emergency personnel: Use personal protective clothing. Ensure adequate ventilation. Keep away from sources of ignition. For emergency responders: Advice on product handling can be found in sections 7 and 8 of this safety data sheet. Information regarding personal protective measures, see section 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal according with the waste regulations (see section 13). Clean preferably with a detergent; avoid the use of solvents. Ensure adequate ventilation.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Do not return residues to the storage containers. Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws. Avoid inhalation of vapour and spray mist. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

Avoid all sources of ignition: heat, sparks, open flame. The relevant fire protection measures should be noted.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from oxidising agents, from strongly alkaline and strongly acid materials. Segregate from acids and acid forming substances.

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Polyethyleneterephthalate (PET), Polypropylene (PP)
Further information on storage conditions: Keep container dry. Keep in a cool, well-ventilated place. Avoid direct sunlight. Store only in corrosion proof containers. Close containers carefully once opened and store them upright in order to prevent any leakage. No smoking. No admission for unauthorised personnel. Always keep in containers of same material as the original one. Observe label precautions. avoid contact with metals Store protected against freezing.

Storage stability:

Storage temperature: 0 - 40 °C

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

1310-73-2: sodium hydroxide

STEL value 2 mg/m³ (WEL/EH 40 (UK))

Ceiling limit value/factor: 15 min

Biological limit values (BLV)

No data available.

Components with DNEL

1310-73-2: sodium hydroxide

worker: Long-term exposure - local effects, Inhalation: 1.0 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation. This can be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn.

Personal protective equipment

Respiratory protection:

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

Respiratory protection required if exposure limit (if available) may be exceeded (Gas filter EN 14387 B)

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

butyl rubber gloves - material thickness: 0.5 mm

nitrile rubber (NBR) - 0.4 mm coating thickness

Performance level 6, corresponding to a breakthrough time of >480 min according to EN ISO 374-1

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).

The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

General safety and hygiene measures

Do not breathe vapour/spray. Eye wash fountains and safety showers must be easily accessible.

Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing immediately and dispose of safely. Hands and/or face should be washed before breaks and at the end of the shift. Keep separated from food stuffs and feed stocks.

Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	liquid
Colour:	clear to opaque
Odour:	mild
pH value:	14.0
Melting point:	5 °C
onset of boiling:	100 °C
Flash point:	not applicable
Flammability:	not applicable
Lower explosion limit:	not determined
Ignition temperature:	not determined
Vapour pressure:	(20 °C) not determined
	(50 °C) not determined

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

Density:	1.430 g/cm ³ (20 °C)
Solubility in water:	completely miscible
Viscosity, dynamic:	< 50 mPa*s (20 °C)
Viscosity, kinematic:	6.0 mm ² /s (20 °C)
	(40 °C)
Explosion hazard:	not determined
Fire promoting properties:	not explosive
	not fire-propagating

9.2. Other information

Self heating ability: It is not a substance capable of spontaneous heating.

Miscibility with water:

miscible

Flow time:

< 30 s

(DIN EN ISO 2431; 3 mm)

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effect on metals.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

May react with aluminum, zinc or tin, with formation of hydrogen. In reaction with acids exothermic reaction.

10.4. Conditions to avoid

Avoid direct sunlight. Avoid freezing. avoid contact with metals

10.5. Incompatible materials

Substances to avoid:

metal, acid forming substances, Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions., acids

10.6. Hazardous decomposition products

When exposed to high temperatures hazardous decomposition products such as carbon monoxide, carbon dioxide, smoke, oxides of nitrogen may be produced., No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

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

Irritation

Assessment of irritating effects:

Highly corrosive! Damages skin and eyes. May cause severe damage to the eyes.

May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach.

Respiratory/Skin sensitization

Assessment of sensitization:

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

Germ cell mutagenicity

Assessment of mutagenicity:

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

Carcinogenicity

Assessment of carcinogenicity:

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

Reproductive toxicity

Assessment of reproduction toxicity:

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

Developmental toxicity

Assessment of teratogenicity:

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

Specific target organ toxicity (single exposure)

Assessment of STOT single:

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

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

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

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

Aspiration hazard

No aspiration hazard expected.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

There are no test results available for this product. Do not allow to enter drains or waterways. The mixture has been assessed following regulation (EC) No 1272/2008 and is not classified as dangerous for the environment.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

No data available concerning biodegradation and elimination.

12.3. Bioaccumulative potential

Bioaccumulation potential:

No data available.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7. Additional information

Other ecotoxicological advice:

Do not allow to enter drains or waterways. Do not allow to enter soil, waterways or waste water channels.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

Observe national and local legal requirements.
No disposal via sewage or waste water systems.

Dispose of the substance/product as special waste in accordance with Directive 2008/98/EC.

Waste key:

Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging:

Containers which are not properly emptied must be disposed pursuant to Directive 2008/98/EC

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14: Transport Information

Land transport

ADR

UN number	UN1824
UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es):	8
Packing group:	II
Environmental hazards:	no
Special precautions for user:	Tunnel code: E

RID

UN number	UN1824
UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es):	8
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Inland waterway transport

ADN

UN number	UN1824
UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es):	8
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number:	UN 1824
UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es):	8
Packing group:	II
Environmental hazards:	no
	Marine pollutant: NO
Special precautions for user:	None known

Air transport

IATA/ICAO

UN number:	UN 1824
UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es):	8
Packing group:	II
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	None known

14.1. UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

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

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

SECTION 15: Regulatory Information

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

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

VOC content: 0.0 %

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
Listed in above regulation: no

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

SECTION 16: Other Information

Literature and Data Sources: REACH-Regulation (EC) No. 1907/2006. CLP-Regulation (EC) No. 1272/2008.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
Met. Corr.	Corrosive to metals
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 09.09.2021

Version: 2.0

Date previous version: 28.01.2019

Previous version: 1.0

Product: **Ardrox 185L**

(ID no. 30714439/SDS_GEN_GB/EN)

Date of print 07.03.2022

waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.