MELBROME BROMINE TABLETS

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reference number: 161162416
Issue date: 29/11/2023 Revision Date: 25/11/2024 Version: 4.0

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

1.1. Product identifier

Product form : Article
Product name : MELBROME BROMINE TABLETS
Product code : 161162416

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

1.2.1. Relevant identified uses

Main use category : Disinfectant
Industrial/Professional use spec : Industrial

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

UNICLEAN CHEMICAL & GASES LTD - UNIMARINE GROUP
PTOLEMEON 53
3041 LIMASSOL
CYPRUS
T +35725331054
info@unimarine-services.com

1.4. Emergency telephone number

Emergency number : +357 25331054

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidizing Solids Category 3	H272
Acute toxicity (oral), Category 4	H302
Skin Corrosion / Irritation	H314
Sensitisation (Skin) Category 1	H317
Serious eye damage/eye irritation, Category 1	H318
Acute Toxicity (Inhalation) Category 4	H332
Carcinogenicity Category 2	H351
Hazardous to the Aquatic Environment Acute Hazard Category 1	H400

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Acute toxicity if inhaled or digested. Carcinogenicity. Cause skin corrosion and irritation. Very toxic to aquatic organisms.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS03 GHS05 GHS07 GHS02 GHS09

Signal word (CLP) : Danger
Contains : 1-bromo-3-chloro-5,5-dimethylhydantoin
Hazard statements (CLP) : H272 – May intensify fire; oxidizer
H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H332 - Harmful if inhaled.
H351 - Suspected of causing cancer.
H400 - Very toxic to aquatic life.

Precautionary statements (CLP) : P101- If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read carefully and follow all instructions.
P201 – Other special instructions before use.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P220 - Keep away from clothing and other combustible materials.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If more than 15 mins from Doctor, INDUCE VOMITING (if conscious).
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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.
P308 + P313 - IF exposed or concerned: Get medical advice/ attention.
P310 - Immediately call a POISON CENTER/doctor/physician/first aider.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 – Collect spillage.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-bromo-3-chloro5,5- dimethylhydantoin	CAS-No.: 32718-18-6 EC-No.: 251-171-5 EC Index-No.: Not available REACH No.: Not available	60	Oxidizing Solids Category , Acute Toxicity (Oral and Inhalation) Category 4 – H302 + H332, Skin Corrosion/Irritation Category 1B – H314,

			Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 1, Carcinogenicity Category 2 – H351, Hazardous to the Aquatic Environment Acute Hazard Category 1 – H400; H272, H317, H318, EUH031

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Remove person to fresh air and keep comfortable for breathing. Lay patient down. Keep warm and rest.

First-aid measures after inhalation : If fumes or combustion products are inhaled remove from contaminated area. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay. Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs). Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. This must definitely be left to a doctor.

First-aid measures after skin contact : Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Transport to hospital, or doctor.

First-aid measures after eye contact : Immediately hold eyelids apart and flush the eye continuously with running water for at least 15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

First-aid measures after ingestion : Urgent hospital treatment is likely to be needed. If swallowed, do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

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

Symptoms/effects after eye contact : See section 11.

Symptoms/effects after ingestion : See section 11.

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

For acute or short term repeated exposures to strong acids:

Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially. Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise. Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the dessicating action of the acid on proteins in specific tissues.

INGESTION: Immediate dilution (milk or water) within 30 minutes post ingestion is recommended. DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury. Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult. Charcoal has no place in acid management. Some authors suggest the use of lavage within 1 hour of ingestion.

SKIN: Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping. Deep second-degree burns may benefit from topical silver sulfadiazine.

EYE: Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjuctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DO NOT use neutralising agents or any other additives. Several litres of saline are required. Cycloplegic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury. Steroid eye drops should only be administered with the approval of a consulting ophthalmologist).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : For small fire: Use flooding quantities of water. Water spray. Dry powder. Foam.
For large fire: Flood fire area with water from a protected position

Unsuitable extinguishing media : **DO NOT use dry chemical, CO2, foam or halogenated-type extinguishers.**.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Combustion/decomposition may produce acrid/toxic fumes of carbon monoxide (CO). Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition. May emit irritating, poisonous or corrosive fumes.

5.3. Advice for firefighters

Protection during firefighting : May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water courses. Fight fire from a safe distance, with adequate cover. Extinguishers should be used only by trained personnel. Use water delivered as a fine spray to control fire and cool adjacent area.

Fire/Explosion Hazard : Will not burn but increases intensity of fire. May explode from friction, shock, heat or containment. Heating may cause expansion or decomposition leading to violent rupture of containers. Heat affected containers remain hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : For further information refer to section 8: "Exposure controls/personal protection".

6.1.2. For emergency responders

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

For further information refer to section 12.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : **Minor Spills:** Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material. Check regularly for spills and leaks. Clean up all spills immediately. No smoking, naked lights, ignition sources. Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result. Avoid breathing dust or vapours and all contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with dry sand, earth, inert material or vermiculite. **DO NOT use sawdust as fire may result.**
Major Spills: Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water courses. No smoking, flames or ignition sources. Increase ventilation.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : For oxidisers, including peroxides. Avoid personal contact and inhalation of dust, mist or vapours. Provide adequate ventilation. Always wear protective equipment and wash off any spillage from clothing. Keep material away from light, heat, flammables or combustibles.

Keep cool, dry and away from incompatible materials. Avoid physical damage to containers.

Other information : Store in original containers. Keep containers securely sealed as supplied. Store in a cool, well ventilated area. Keep dry. Store under cover and away from sunlight. Store away from flammable or combustible materials, debris and waste. Contact may cause fire or violent reaction. In addition, Goods of Class 5.1, packing group II should be: stored in piles so that

The height of the pile does not exceed 1 metre. The maximum quantity in a pile or building does not exceed 1000 tonnes unless the area is provided with automatic fire extinguishers.

The maximum height of a pile does not exceed 3 metres where the room is provided with automatic fire extinguishers or 2 meters if not. The minimum distance between piles is not less than 2 metres where the room is provided with automatic fire extinguishers or 3 meters if not. The minimum distance to walls is not less than 1 metre.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : **DO NOT repack.** Use containers supplied by manufacturer only. For low viscosity materials

Drums and jerricans must be of the non-removable head type. Where a can is to be used as an inner package, the can must have a screwed enclosure. For materials with a viscosity of at least 2680 cSt. (23ºC) and solids: Removable head packaging and cans with friction closures may be used.

Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages. In addition, where inner packagings are glass and contain liquids of packing group I and II there must be sufficient inert absorbent to absorb any spillage *.

* unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.

Storage incompatibility : Avoid storage with reducing agents. Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous. Contact with acids produces toxic fumes. Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.Segregate from alcohol, water. Avoid strong bases. Inorganic reducing agents react with oxidizing agents to generate heat and products that may be flammable, combustible, or otherwise reactive. Their reactions with oxidizing agents may be violent.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. Occupational Exposure Limits (OEL)

1-bromo-3-chloro-5,5-dimethylhydantoin	
TEEL-1	4.2 mg/m³
TEEL-2	46 mg/m³
TEEL-3	280 mg/m³

8.1.5. Control banding

1-bromo-3-chloro-5,5-dimethylhydantoin	
Occupational Exposure Band Rating	D
Occupational Exposure Band Limit	> 0.01 to ≤ 0.1 mg/m³

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Ensure there is ready access to a safety shower. Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

- Chemical goggles.
- Full face shield may be required for supplementary but never for primary protection of eyes.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate.

8.2.2.2. Skin protection

Wear chemical protective gloves, e.g. PVC and safety footwear or safety gumboots, e.g. Rubber.
The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
DO NOT wear cotton or cotton-backed gloves.
DO NOT wear leather gloves.
Promptly hose all spills off leather shoes or boots or ensure that such footwear is protected with PVC over-shoes.

8.2.2.3. Respiratory protection

Respiratory protection:
Type AB-P Filter of sufficient capacity.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
For further information see section 12.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solids
Colour	: White
Appearance	: White Tablets.
Odour	: Not available.
Odour threshold	: Not available
Melting point	: 156-162ºC
Freezing point	: Not applicable
Boiling point	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not applicable
pH	: 3-5
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Partly miscible

Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	0.04kPa
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1.87
Relative vapour density at 20°C	:	1.87
Particle size	:	Not available
Flammability	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

See more information in section 7.2.

10.2. Chemical stability

Unstable in the presence of incompatible materials. Product is considered stable under normal handling conditions. Prolonged exposure to heat. Hazardous polymerisation will not occur.

10.3. Possibility of hazardous reactions

See more information in section 7.2.

10.4. Conditions to avoid

See more information in section 7.2.

10.5. Incompatible materials

See more information in section 7.2.

10.6. Hazardous decomposition products

See more information in section 7.2 and 5.3.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Low toxicity. Harmful if ingested. Can produce chemical burns within the oral cavity
Acute toxicity (dermal)	:	Low toxicity. Chemical burns
Acute toxicity (inhalation)	:	Significant. Irritation of the respiratory system.

1-bromo-3-chloro-5,5- dimethylhydantoin	
LD50 dermal (rabbit)	> 2000 mg/kg - Primary Skin Irritation
LD50 oral (rat)	1390 mg/kg – Severe

Skin corrosion/irritation	:	Chemical burn.
Serious eye damage/irritation	:	Vapours or mists may be extremely irritating.
Respiratory or skin sensitisation	:	Irritation of the respiratory system
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Yes
Reproductive toxicity	:	Not classified

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic organisms..
Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic organisms.
Hazardous to the aquatic environment, long–term (chronic) : Very toxic to aquatic organisms.

1-bromo-3-chloro-5,5- dimethylhydantoin	
LC50 - Fish	0.26-0.4mg/L (Test Duration: 96h)
EC50 - Crustacea	0.84-1.04mg/L (Test Duration: 48h)
EC50 (ECx) - Crustacea	0.2mg/l (Test duration: 96h)

12.2. Persistence and degradability

High persistence in water/soil and air of the ingredient: 1-bromo-3-chloro-5,5- dimethylhydantoin.

12.3. Bioaccumulative potential

Bioaccumulation of 1-bromo-3-chloro-5,5- dimethylhydantoin is LOW (LogKOW = -0.9441).

12.4. Mobility in soil

Mobility of 1-bromo-3-chloro-5,5- dimethylhydantoin is LOW (Log KOC = 23.14).

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. DO NOT allow wash water from cleaning or process equipment to enter drains.
For small quantities of oxidising agent:

- Cautiously acidify a 3% solution to pH 2 with sulfuric acid.
- Gradually add a 50% excess of sodium bisulfite solution with stirring.
- Add a further 10% sodium bisulfite.
- If no further reaction occurs (as indicated by a rise in temperature) cautiously add more acid.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	: UN3085
UN-No. (IMDG)	: UN3085
UN-No. (IATA)	: UN3085
UN-No. (ADN)	: UN3085
UN-No. (RID)	: UN3085

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: OXIDIZING SOLID, CORROSIVE, N.O.S. (contains 1-bromo-3-chloro-5,5-dimethylhydantoin)
Proper Shipping Name (IMDG)	: OXIDIZING SOLID, CORROSIVE, N.O.S. (contains 1-bromo-3-chloro-5,5-dimethylhydantoin)
Proper Shipping Name (IATA)	: Oxidizing solid, corrosive, n.o.s. * (contains 1-bromo-3-chloro-5,5-dimethylhydantoin)
Proper Shipping Name (ADN)	: OXIDIZING SOLID, CORROSIVE, N.O.S. (contains 1-bromo-3-chloro-5,5-dimethylhydantoin)
Proper Shipping Name (RID)	: OXIDIZING SOLID, CORROSIVE, N.O.S. (contains 1-bromo-3-chloro-5,5-dimethylhydantoin)

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 5.1

Subsidiary Hazard (ADR) : 8

Labels (ADR) :

IMDG

Transport hazard class(es) (IMDG) : 5.1

Subsidiary Hazard (IMDG) : 8

Labels (IMDG) :

IATA

Transport hazard class(es) (IATA) : 5.1

Subsidiary Hazard (IATA) : 8

ERG Code (IATA) : 5C

Labels (IATA) :

ADN

Transport hazard class(es) (ADN) : 5.1, 8

Lables (ADN)

RID

Transport hazard class(es) (RID) : 5.1

Subsidiary Hazard (RID) : 8

Labels (RID) :

14.4. Packing group

Packing group (ADR)	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

14.5. Environmental hazards

Pollutant:	: Yes
Other information	: DO NOT discharge into sewer or waterways.

14.6. Special precautions for user

Overland transport

Hazard identification (Kemler):	: 58
Classification code	: OC2
Special provisions	: 274
Limited quantity	: 5kg
Tunnel Restriction Code	: E

Transport by sea

EMS Number	: F-A, S-Q
Special provisions	: 223 274
Limited Quantities	: 5kg

Air transport

Special provisions	: A3 A803
Cargo Only Packing Instructions	: 563
Cargo Only Maximum Qty / Pack	: 100kg
Passenger and Cargo Packing Instructions	: 559
Passenger and Cargo Maximum Qty/Pack	: 25kg
Passenger and Cargo Limited Qty Packing Instructions	: Y545
Passenger and Cargo Limited Maximum Qty / Pack	: 5kg

Inland waterway transport

Classification code	: OC2
Special provisions	: 274
Limited quantity	: 5kg
Equipment required	: PP, EP
Fire cones number	: 0

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

According to 2012/18/EU (Seveso III) Category: E1

15.2. Chemical safety assessment

National Inventory	1-bromo-3-chloro-5,5-dimethylhydantoin is declared in the inventory
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
TEEL	Temporary Emergency Exposure Limit
CAS-No.	Chemical Abstract Service number
PBT	Persistent Bioaccumulative Toxic
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:	
EUH031	Contact with acids liberates toxic gas.
H272	Oxidizing Solids Category 3
H302	Acute Toxicity (Oral) Category 4
H314	Skin Corrosion/Irritation Category 1B
H317	Sensitisation (Skin) Category 1
H318	Serious Eye Damage/Eye Irritation Category 1.
H332	Acute Toxicity (Inhalation) Category 4
H351	Carcinogenicity Category 2
H400	Hazardous to the Aquatic Environment Acute Hazard Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.