

	<b>SAFETY DATA SHEET</b>	Page : 1 / 10
		Revision nr : 1.0
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Issue date : 19/06/2018
		Supersedes :

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

### 1.1. Product identifier

Product form : Article  
Trade name/designation : Coin manganese dioxide lithium batteries (Standard)  
Product code : CR1216%, CR1220%, CR1616%, CR1620%, CR1632%,  
CR2016%, CR2025%, CR2032%, CR2430%, CR2450%, CR2477%

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

#### 1.2.1. Relevant identified uses

Intended for general public  
Use of the substance/mixture : Button cell battery

#### 1.2.2. Uses advised against

No data available

### 1.3. Details of the supplier of the safety data sheet

Tohoku Murata Manufacturing Co., Ltd.  
1-1 Shimosugishita, Takakura, Hiwada-machi, Koriyama-shi  
Fukushima 963-0531 - JAPAN  
T +81 24 955 7834  
[murata.tohoku@murata.com](mailto:murata.tohoku@murata.com)

### 1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, 24/7, healthcare professionals only)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Water-react. 1 H260  
Acute Tox. 4 (Oral) H302  
Skin Irrit. 2 H315  
Eye Dam. 1 H318  
Repr. 1B H360  
Aquatic Acute Not classified

Full text of H statements : see section 16

### 2.2. Label elements

Article. According to EC directives or the corresponding national regulations there is no labelling obligation for this product.

### 2.3. Other hazards

Other hazards : PBT/vPvB data : Not applicable . This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable

	<b>SAFETY DATA SHEET</b>	Page : 2 / 10
		Revision nr : 1.0
		Issue date : 19/06/2018
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Supersedes :

conditions of use.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Manganese dioxide	(CAS-No.) 1313-13-9 (EC-No.) 215-202-6 (EC Index) 025-001-00-3	20 - 40	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302
Propylene carbonate	(CAS-No.) 108-32-7 (EC-No.) 203-572-1 (EC Index) 607-194-00-1	2 - 8	Eye Irrit. 2, H319
1,2-dimethoxyethane substance listed as REACH Candidate (1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME))	(CAS-No.) 110-71-4 (EC-No.) 203-794-9 (EC Index) 603-031-00-3	1 - 4	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:dust,mist), H332 Repr. 1B, H360FD
Lithium	(CAS-No.) 7439-93-2 (EC-No.) 231-102-5 (EC Index) 003-001-00-4	1 - 3	Water-react. 1, H260 Skin Corr. 1B, H314

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

Additional advice	: First aider: Pay attention to self-protection. See also section 8 . Show this safety data sheet to the doctor in attendance. Treat symptomatically. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician.
Inhalation	: Remove affected person from the danger area and lay down. Provide fresh air. In case of shortness of breath, give oxygen. Call a physician immediately.
Skin contact	: Remove contaminated, saturated clothing immediately. Rinse immediately with plenty of water for at least 15 minutes. Get medical advice/attention.
Eyes contact	: Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
Ingestion	: Drink 1 or 2 glasses of water. Induce vomiting, but only if victim is fully conscious. Get medical advice/attention.

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

Inhalation	: None under normal processing.
Skin contact	: None under normal processing. Causes skin irritation.
Eyes contact	: None under normal processing. Causes serious eye damage.
Ingestion	: None under normal processing. Harmful if swallowed.
Chronic symptoms	: May damage fertility or the unborn child.

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

No data available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: dry extinguishing powder /. Carbon dioxide . Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Strong water jet .

	<b>SAFETY DATA SHEET</b>	Page : 3 / 10
		Revision nr : 1.0
		Issue date : 19/06/2018
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Supersedes :

**5.2. Special hazards arising from the substance or mixture**

Specific hazards : Fire or intense heat may cause violent rupture of the packages. Hazardous decomposition products. Carbon oxides . Fumes (Li<sub>2</sub>O). Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

**5.3. Advice for firefighters**

Firefighting instructions : Special protective equipment for firefighters. In case of fire: Wear self-contained breathing apparatus.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**6.1.1. For non-emergency personnel**

For non-emergency personnel : Evacuate personnel to a safe area. Provide adequate ventilation. Use personal protective equipment as required. Reference to other sections: 8 . Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Do not breathe vapour.

**6.1.2. For emergency responders**

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Reference to other sections 8.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone. Collect in closed and suitable containers for disposal. Clean with detergents. Avoid solvents. Ensure all waste water is collected and treated via a waste water treatment plant.

**6.4. Reference to other sections**

Concerning disposal elimination after cleaning, see section 13. Concerning personal protective equipment to use, see section 8 .

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not allow to enter into surface water or drains. Avoid shock and friction.

Hygiene measures : Use only in area provided with appropriate exhaust ventilation. Wash hands and face before breaks and immediately after handling of the product. When using do not eat, drink or smoke. Keep good industrial hygiene.

**7.2. Conditions for safe storage, including any incompatibilities**

Technical measures : Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity. Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid shock and friction. Protect from sunlight. Recommended storage temperature: 10°C–25°C. Keep at temperature not exceeding 30°C.

Packaging materials : Do not pierce or burn, even after use.

**7.3. Specific end use(s)**

No data available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

	<b>SAFETY DATA SHEET</b>	Page : 4 / 10
		Revision nr : 1.0
		Issue date : 19/06/2018
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Supersedes :

<b>Manganese dioxide (1313-13-9)</b>		
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	0,02 mg/m <sup>3</sup> (respirable dust)
Latvia	OEL TWA (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup> (disintegration aerosol)
<b>Lithium (7439-93-2)</b>		
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	0,02 mg/m <sup>3</sup> (inhalable dust)
<b>1,2-dimethoxyethane (110-71-4)</b>		
Latvia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
<b>Propylene carbonate (108-32-7)</b>		
Latvia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Lithuania	IPRV (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>

Additional information : Concentration measurement in air. Personal air monitoring

### **8.2. Exposure controls**

- Engineering measure(s) : Provide adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Eye wash bottle with pure water. Emergency safety showers should be available in the immediate vicinity of any potential exposure. Take precautionary measures against static discharges. Organisational measures to prevent /limit releases, dispersion and exposure : See also section 7 .
- Personal protective equipment : Wear suitable protective clothing.
- Hand protection : Not required for normal conditions of use. Protective gloves (EN 374). The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves. (neoprene gloves. NBR (Nitrile rubber))
- Eye protection : Not required for normal conditions of use. Safety glasses (EN 166)
- Body protection : Wear suitable coveralls to prevent exposure to the skin.
- Respiratory protection : Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment. Full face mask (EN 136). Half-face mask (DIN EN 140). Filter type: ABEKP (EN141).
- Thermal hazard protection : Not required for normal conditions of use.
- Environmental exposure controls : Do not allow to enter into surface water or drains. Comply with applicable Community environmental protection legislation.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

- Physical state : Solid
- Appearance : Button cell battery.
- Colour : silvery.
- Odour : odourless.
- Odour threshold : Not applicable
- pH : Not applicable
- Relative evaporation rate (butylacetate=1) : No data available
- Melting / freezing point : Not applicable
- Freezing point : No data available
- Initial boiling point and boiling range : Not applicable
- Flash point : Not applicable

	<b>SAFETY DATA SHEET</b>	Page : 5 / 10
		Revision nr : 1.0
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Issue date : 19/06/2018
		Supersedes :

Auto-ignition temperature	: Not self-igniting
Decomposition temperature	: Not applicable
Flammability (solid, gas)	: No data available
Vapour pressure	: Not applicable
Vapour density	: Not applicable
Relative density	: Not applicable
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water	: Not applicable
Kinematic viscosity	: Not applicable
Dynamic viscosity	: Not applicable
Explosive properties	: Not applicable.
Oxidising properties	: Not applicable.
Explosive limits	: Not applicable

#### **9.2. Other information**

Additional information : Values : 3 V

### **SECTION 10: Stability and reactivity**

#### **10.1. Reactivity**

Reference to other sections: 10.5.

#### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

#### **10.3. Possibility of hazardous reactions**

No data available.

#### **10.4. Conditions to avoid**

Avoid shock and friction. Humidity. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Safe handling: see section 7.

#### **10.5. Incompatible materials**

Strong oxidizing agents. Strong acids. Base metal. Halogenated compounds. See also section 7.

#### **10.6. Hazardous decomposition products**

Burning produces noxious and toxic fumes. Carbon oxides (CO, CO<sub>2</sub>).

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

Acute toxicity : Oral: Harmful if swallowed. (Article: Not applicable)

ATE CLP (oral)	1250 mg/kg bodyweight
----------------	-----------------------

#### **Manganese dioxide (1313-13-9)**

LD50/oral/rat	9000 mg/kg
---------------	------------

#### **1,2-dimethoxyethane (110-71-4)**

LD50/oral/rat	> 4000 mg/kg
---------------	--------------

LD50/dermal/rabbit	1000 - 2000 mg/kg
--------------------	-------------------

LC50/inhalation/4h/rat	20 - 63 mg/l (Exposure time: 6 h)
------------------------	-----------------------------------

#### **Propylene carbonate (108-32-7)**

LD50/oral/rat	29000 mg/kg
---------------	-------------

LD50/dermal/rabbit	> 3000 mg/kg
--------------------	--------------

Skin corrosion/irritation : Causes skin irritation. (Article: Not applicable)  
pH: Not applicable

	<b>SAFETY DATA SHEET</b>	Page : 6 / 10
		Revision nr : 1.0
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Issue date : 19/06/2018
		Supersedes :

Serious eye damage/irritation	: Causes serious eye damage. (Article: Not applicable) pH: Not applicable
Respiratory or skin sensitisation	: Not classified Substances are only released upon destruction of the system.
Germ cell mutagenicity	: Not classified (Article: Not applicable)
Carcinogenicity	: Not classified (Article: Not applicable)
Reproductive toxicity	: May damage fertility or the unborn child. (Article: Not applicable)
STOT-single exposure	: Not classified (Article: Not applicable)
STOT-repeated exposure	: Not classified (Article: Not applicable)
Aspiration hazard	: Not classified (Article: Not applicable)
Other information	: Symptoms related to the physical, chemical and toxicological characteristics. Reference to other sections: 4.2.

## SECTION 12: Ecological information

### 12.1. Toxicity

Environmental properties : Ecological injuries are not known or expected under normal use.

<b>Propylene carbonate (108-32-7)</b>	
LC50 fish 1	> 1000 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 1	> 500 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### 12.2. Persistence and degradability

<b>Coin manganese dioxide lithium batteries (Standard)</b>	
Persistence and degradability	Article : Not applicable.

### 12.3. Bioaccumulative potential

<b>Coin manganese dioxide lithium batteries (Standard)</b>	
Partition coefficient n-octanol/water	Not applicable
Bioaccumulative potential	Article : Not applicable.
<b>Manganese dioxide (1313-13-9)</b>	
BCF fish 1	(no bioaccumulation expected)
Partition coefficient n-octanol/water	< 0 (at 20 °C)
<b>Propylene carbonate (108-32-7)</b>	
Partition coefficient n-octanol/water	0,48 (at 25 °C)

### 12.4. Mobility in soil

<b>Coin manganese dioxide lithium batteries (Standard)</b>	
Mobility in soil	Not applicable
Ecology - soil	Not applicable.

### 12.5. Results of PBT and vPvB assessment

<b>Coin manganese dioxide lithium batteries (Standard)</b>	
Results of PBT assessment	Not applicable
<b>ingredient</b>	
1,2-dimethoxyethane (110-71-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

Additional information : No information available

	<b>SAFETY DATA SHEET</b>	Page : 7 / 10
		Revision nr : 1.0
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Issue date : 19/06/2018
		Supersedes :

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods



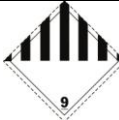


Product/Packaging disposal recommendations : Handle with care. Reference to other sections 7. Handling and storage . Dispose of as hazardous waste in compliance with local and national regulations. Refer to manufacturer/supplier for information on recovery/recycling. Collect and dispose of waste product at an authorised disposal facility.

Additional information : Do not pierce or burn, even after use. Dispose of contaminated materials in accordance with current regulations.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : Classified as hazardous waste according to European Union regulations.

### SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
3090	3090	3090	3090	3090
<b>14.2. UN proper shipping name</b>				
LITHIUM METAL BATTERIES	LITHIUM METAL BATTERIES	Lithium metal batteries	LITHIUM METAL BATTERIES	LITHIUM METAL BATTERIES
<b>Transport document description</b>				
UN 3090 LITHIUM METAL BATTERIES, 9A, (E)	UN 3090 LITHIUM METAL BATTERIES, 9	UN 3090 Lithium metal batteries, 9	UN 3090 LITHIUM METAL BATTERIES, 9A	UN 3090 LITHIUM METAL BATTERIES, 9A
<b>14.3. Transport hazard class(es)</b>				
9A	9A	9	9A	9A
				
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
Not applicable				

#### 14.6. Special precautions for user

Special precautions for user : No data available

#### - Overland transport

Classification code (ADR) : M4  
 Special provisions : 188, 230, 310, 376, 377, 636  
 Limited quantities (ADR) : 0  
 Excepted quantities (ADR) : E0  
 Packing instructions (ADR) : P903, P908, P909, P910, LP903, LP904  
 Transport category (ADR) : 2  
 Tunnel restriction code : E  
 EAC code : 4W

#### - Transport by sea

Special provisions (IMDG) : 188, 230, 310, 376, 377, 384

	<b>SAFETY DATA SHEET</b>	Page : 8 / 10
		Revision nr : 1.0
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Issue date : 19/06/2018
		Supersedes :

Packing instructions (IMDG) : P903, P908, P909 , P910, LP903, LP904  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-I  
Stowage category (IMDG) : A  
Stowage and handling (IMDG) : SW19  
Properties and observations (IMDG) : Electrical batteries containing lithium encased in a rigid metallic body. Lithium batteries may also be shipped in, or packed with, equipment. Electrical lithium batteries may cause fire due to an explosive rupture of the body caused by improper construction or reaction with contaminants.

**- Air transport**

Transport regulations (IATA) : The Rechargeable Li-Polymer Battery Pack can be shipped by air in accordance to Section II/Section IB of PACKING INSTRUCTION 965, or SECTION II of PACKING INSTRUCTION 966-967 of the 2018 IATA Dangerous Goods regulations 59th Edition.  
PCA Excepted quantities (IATA) : E0  
PCA Limited quantities (IATA) : Forbidden  
PCA limited quantity max net quantity (IATA) : Forbidden  
PCA packing instructions (IATA) : Forbidden  
PCA max net quantity (IATA) : Forbidden  
CAO packing instructions (IATA) : See 968  
CAO max net quantity (IATA) : See 968  
Special provisions (IATA) : A88, A99, A154, A164, A183, A201, A206  
ERG code (IATA) : 9FZ

**- Inland waterway transport**

Classification code (ADN) : M4  
Special provisions (ADN) : 188, 230, 310, 376, 377, 636  
Limited quantities (ADN) : 0  
Excepted quantities (ADN) : E0  
Equipment required (ADN) : PP  
Number of blue cones/lights (ADN) : 0

**- Rail transport**

Classification code (RID) : M4  
Special provisions (RID) : 188, 230, 310, \_376, 677, 636  
Limited quantities (RID) : 0  
Excepted quantities (RID) : E0  
Packing instructions (RID) : P903, 908, 909, P910, LP903, LP904  
Transport category (RID) : 2  
Colis express (express parcels) (RID) : CE2  
Hazard identification number (RID) : 90

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Code: IBC : Not applicable.

**SECTION 15: Regulatory information**

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

**15.1.1. EU-Regulations**



	<b>SAFETY DATA SHEET</b>	Page : 9 / 10
		Revision nr : 1.0
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Issue date : 19/06/2018
		Supersedes :

Contains one substance (s) from the list of candidate substances of REACH in a concentration > 0,1%: 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) (EC 203-794-9, CAS 110-71-4)

### 15.1.2. National regulations

#### Germany

Reference to AwSV : Water hazard class (WGK) 1, low hazard to waters (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : 1,2-dimethoxyethane is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : 1,2-dimethoxyethane is listed

#### Denmark

Recommendations Danish Regulation : Not applicable

### 15.2. Chemical safety assessment

Not required

## SECTION 16: Other information

Abbreviations and acronyms:

ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
EC50 = Median Effective Concentration
LC50 = Median lethal concentration
LD50 = Median lethal dose
TLV = Threshold limits
TWA = time weighted average
STEL = Short term exposure limit
persistent, bioaccumulating and toxic (PBT).
vPvB = very persistent and very bioaccumulating
WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the datasheet : Name (SDS) : Coin manganese dioxide lithium batteries (Standard). Date of issue : January 1, 2018. Report N° SDS-A59R-001E. Manufacturer/Supplier : Tohoku Murata Manufacturing Co, Ltd. ECHA (European Chemicals Agency).

Full text of H- and EUH-statements:

	<b>SAFETY DATA SHEET</b>	Page : 10 / 10
		Revision nr : 1.0
	<b>Coin manganese dioxide lithium batteries (Standard)</b>	Issue date : 19/06/2018
		Supersedes :

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity Category 4
Acute Tox. 4 (Oral)	Acute toxicity Category 4
Aquatic Acute Not classified	Hazardous to the aquatic environment - Acute Hazard Not classified
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Water-react. 1	Substances and Mixtures which, in contact with water, emit flammable gases, Category 1
H225	Highly flammable liquid and vapour.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H360	May damage fertility or the unborn child.
H360FD	May damage fertility. May damage the unborn child.

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Classification according to Regulation (EC) No. 1272/2008 [CLP]  
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.