Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

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

· **1.1 Product identifier**

· **Trade name: ACTICIDE MBL**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Application of the substance / the mixture** Biocidal product for industrial use.

· **1.3 Details of the supplier of the safety data sheet**
· **Address and telephone number of the supplier:**
Thor Specialities (UK) LTD.
Wincham Avenue
Wincham Northwich
Cheshire CW9 6GB
United Kingdom
Phone: (UK) +44 (0) 1606 818800
Fax: (UK) +44 (0) 1606 818801
· **Competent person responsible for the Material Safety Data Sheet:**
Regulatory Department: sds@thor.uk.com

· **1.4 Emergency telephone number:**
National Poisons Information Service (24 h service):
Phone: +44 (0) 844-892-0111 (UK only)
Transport Emergency phone number (24 h service):
Phone: +49 621 60-43333 - Fax: +49 621 60-92664

*

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS05 corrosion

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

GHS09 environment

Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

GHS07

Skin Sens. 1	H317	May cause an allergic skin reaction.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is labelled according to the CLP regulation.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 1)

· **Hazard pictograms**

GHS05 GHS07 GHS09

· **Signal word** Danger
· **Hazard-determining components of labelling:**
1,2-benzisothiazol-3(2H)-one
2-methylisothiazol-3(2H)-one
· **Hazard statements**
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.
· **Precautionary statements**

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local/regional/national/ international regulations.

· **2.3 Other hazards** Other hazards have not been identified for this product.

*

SECTION 3: Composition/information on ingredients

· **3.2 mixtures**
· **Description:** Preservative based on isothiazolones.

· **Dangerous components:**

CAS: 52-51-7 EINECS: 200-143-0 Index number: 603-085-00-8	Bronopol Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1) Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; STOT SE 3, H335	7.5 - 8.5%

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 2)

CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6	1,2-benzisothiazol-3(2H)-one Acute Tox. 2, H330 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1); Aquatic Chronic 2, H411 Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	2.3 - 2.7%
CAS: 2682-20-4 EINECS: 220-239-6	2-methylisothiazol-3(2H)-one Acute Tox. 3, H301; Acute Tox. 2, H330 Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1); Aquatic Chronic 2, H411 Skin Sens. 1A, H317	2.3 - 2.7%

· **Additional information** For the wording of the listed risk/hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information**
Obtain special instructions from the poison information centre: Phone: +44 (0) 844-892-0111 (UK only) - see as well section 1.4.
Personal protection for the First Aider.
· **After inhalation** Supply fresh air; consult doctor in case of symptoms.
· **After skin contact**
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.
· **After eye contact**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult an eye specialist immediately.
· **After swallowing**
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
Do not give anything by mouth to an unconscious person.
Bring vomiting person into recovery position.

· **4.2 Most important symptoms and effects, both acute and delayed**
Allergic skin reactions.
Corrosive damage to gastro-intestinal tract.
· **Information for doctor** Probable mucosal damage may contraindicate the use of gastric lavage.
· **Danger**
If swallowed or in case of vomiting, hazard of entering the lungs (aspiration).
Danger of gastric perforation.

· **4.3 Indication of any immediate medical attention and special treatment needed**
If swallowed, gastric irrigation with activated carbon.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
Rinse eyes thoroughly with physiological saline.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 3)

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents** Water spray jet, extinguishing powder, CO_2, foam.
· **Unsuitable extinguishing agents for reasons of safety:** None

· **5.2 Special hazards arising from the substance or mixture**
In case of fire, toxic incineration products may be released such as:
Nitrogen oxides (NOx)
Carbon monoxide (CO)
Sulphur dioxide (SO_2)
Bromine compounds such as HBr, Br_2

· **5.3 Advice for firefighters**
· **Protective equipment:** Wear self-contained breathing apparatus.
· **Additional information**
Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing (see item 8).
Keep unprotected persons away.
When selecting the protective suit attention has to be paid to the complete and safe protection of skin and mucous membranes. Impermeable protective clothes, protective boots made of neoprene, complete face protection and nitrile-rubber-gloves with long tops should be worn.

· **6.2 Environmental precautions:**
As the product is hazardous for the aquatic environment, it must be prevented from reaching surface water.
Prevent from spreading (e. g. by enclosing with a ring of chemical absorbent).
Inform authorities in case of contamination of water or sewage system.

· **6.3 Methods and material for containment and cleaning up:**
Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically.
Suitable binder: multi-purpose absorbent.
Dispose of contaminated material as waste according to item 13.

· **6.4 Reference to other sections** None

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good exhaust ventilation at the workplace.
It is preferable to handle the product in a closed system.
Load carefully, avoid splashes.
Risks to the safety and health of workers may not only be created by work involving chemicals but, inter alia by work equipment and the fitting-out of work-places. Those risks shall be identified and evaluated.
· **Information about protection against explosion and fire:** No special measures required.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 4)

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and containers:**
Store only in the original container.
Information about suitable materials for vessels and piping can be requested from our sales department Tel.: +44(0)1606 818800.
· **Information about storage in a common storage facility:** Store away from foodstuffs.
· **Further information about storage conditions:**
Keep containers tightly sealed.
Prevent release to the environment by adequate secondary containment design and use of appropriate spill control procedures.
· **Recommended storage temperature:** 10-30 °C

· **7.3 Specific end use(s)** No further relevant information available.

*
SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Components with critical values that require monitoring at the workplace:** None established.
· **Additional information:** Information valid at the time of review of safety data sheet.

· **8.2 Exposure controls**
· **Technical protective equipment:**
In case of contamination devices to rinse eyes or skin immediately under running water must be available.
· **Personal protective equipment**
· **General protective and hygienic measures:**
Use skin cream for skin protection.
Avoid contact with the eyes and the skin.
Wash hands during work breaks and at the end of the shift.
Provide skin protection plan.
· **Respiratory protection:** Not necessary if room is well ventilated.
· **Protection of hands:**

Chemical protective gloves according to DIN EN 374 with CE-labelling.

Check the condition of protective gloves after each use for any damages like holes, cuts or tears.
Do not wear protective gloves longer than necessary.
After use of gloves apply skin-cleaning agents and skin cosmetics.
· **Material of gloves:** Nitrile rubber, NBR
· **Penetration time of glove material:**
Thickness: 0.4 mm; break-through time: 480 min; material: Nitrile; permeation: level 6
· **Gloves made of the following materials are not suitable:**
Gloves for mechanical protection do not provide protection against chemicals.
· **Eye protection:**

Face shield (visor)

Use visor in combination with goggle.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 5)

· **Body protection:**

Protective clothing.

Apron

Full head, face and neck protection

· **Risk management measures**
The operators shall be instructed adequately.
The workplace shall be inspected regularly by competent personnel e.g. the safety representative.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Dispersion
Colour:	White - Beige
· **Odour:**	Characteristic
· **Odour threshold:**	Not relevant for safety
· **pH-value at 20 °C:**	2 - 4
· **Change in condition**	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	ca. 100 °C (H_2O)
· **Flash point:**	Not applicable.
· **Self-inflammability:**	Product is not self-igniting.
· **Danger of explosion:**	Product is not explosive.
· **Vapour pressure at 20 °C:**	23 hPa (H_2O)
· **Density at 20 °C**	ca. 1.1 g/cm³
· **Relative density (D^{20}_4) at 20 °C**	1.066 g/cm³ (OECD 109)
· **Solubility in / Miscibility with**	
Water:	Dispersible
· **9.2 Other information**	No further relevant information available.

*

SECTION 10: Stability and reactivity

· **10.1 Reactivity** Corrosive action on metals possible.

· **10.2 Chemical stability**
· **Conditions to be avoided:**
Before handling, the product should not be diluted or mixed with other chemicals, in order to avoid any negative influences on the ingredient(s).
· **Minimum shelf life:** 9 months from production date, if stored at a temperature of about 20 °C

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 6)

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:**
Oxidizing agents
Alkalis (lyes)

· **10.6 Hazardous decomposition products:**
None, if storage and handling is done according to specification.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**		
Oral	LD50	2001-5000 mg/kg (rat) (OECD 423)
Dermal	LD50	> 2000 mg/kg (rat) (OECD 402)
Inhalation	LC50 / 4 h	> 5 mg/l (rat) (OECD 403)

· **Skin corrosion/irritation:**
Causes severe skin burns and eye damage.

· **Results of studies:**		
Dermal	OECD 404 (skin)	corrosive (rabbit) (OECD 404)

· **Serious eye damage/irritation:**
Causes serious eye damage.

· **Results of studies:**		
Irritation of eyes	OECD 405 (eye)	corrosive (rabbit) (OECD 405)

· **Sensitisation:**
May cause an allergic skin reaction.
· **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:** Based on available data, the classification criteria are not met.
· **Aspiration hazard:** Based on available data, the classification criteria are not met.

*

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
additivity formula	0.02 mg/l (calculated)
L(E)C_{50}m - additivity formula	0.6 mg/l (calculated)

· **Evaluation:**
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

· **Toxicity on activated sludge organisms:**	
2634-33-5 1,2-benzisothiazol-3(2H)-one	
EC20 / 3 h	3.3 mg/l (Activated Sludge) (OECD 209)

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 7)

EC50 / 3 h	13 mg/l (Activated Sludge) (OECD 209)
2682-20-4 2-methylisothiazol-3(2H)-one	
EC20 / 3 h	2.8 mg/l (Activated Sludge) (DIN 38412-3 (TTC-Test))
EC50 / 3 h	34.6 mg/l (Activated Sludge) (DIN 38412-3 (TTC-Test))
52-51-7 Bronopol	
EC20 / 3 h	2 mg/l (Activated Sludge) (OECD 209)
EC50 / 3 h	43 mg/l (Activated Sludge) (OECD 209)

· **Evaluation:** Depending on concentration, toxic effects on activated sludge organisms are possible.

· **12.2 Persistence and degradability**

· **Biodegradability:**	
52-51-7 Bronopol	
OECD 301 B CO2-Evolution	> 70 % (Activated Sludge) (OECD 301 B (mod.-Sturm-Test)) REACh dossier
2682-20-4 2-methylisothiazol-3(2H)-one	
OECD 308 Simulation Biodegradation Aqu Sed System	1.28 - 2.1 d (half-life) (OECD 308) S 842
OECD 309 Simulation Biodegradation - Surface Water	4.1 d (half-life) (OECD 309) rapid biodegradable, S 646

· **Evaluation:** The component(s) is (are) rapidly biodegradable.
· **Evaluation:** The substances are biodegradable/eliminable in activated sludge units.

· **12.3 Bioaccumulative potential**

· **BCF / LogKow:**	
2634-33-5 1,2-benzisothiazol-3(2H)-one	
OECD 117 Log Kow (HPLC method)	0.7 (n-Octanol/water) (OECD 117) S 324
OECD 305 Biokonzentrationsfaktor BCF	6.95 BCF (Fish) (OECD 305) S 2243
2682-20-4 2-methylisothiazol-3(2H)-one	
Bioconcentration factor BCF	3.16 (calculated) literature
OECD 117 Log Kow (HPLC method)	-0.32 (n-Octanol/water) (OECD 117) S 325
52-51-7 Bronopol	
Bioconcentration factor BCF	3.16 (calculated) EPIWIN
OECD 107 Log Kow (shake flask method)	0.22 (n-Octanol/water) (OECD 107) S 3658

· **Evaluation:** Not worth-mentioning accumulating in organisms

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**
· **PBT:** This mixture does not contain substances that meet the PBT-criteria of REACH, annex XIII.
· **vPvB:** This mixture does not contain substances that meet the vPvB-criteria of REACH, annex XIII.

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 8)

· **12.6 Other adverse effects** Any other adverse effects on the environment are not expected.
· **12.7 Additional information**
· **Chemical Oxygen Demand (COD-value):** 128 mg O_2/g product
· **Biological oxygen demand (BSB_5-value):** Not applicable
· **Metals and their compounds according Directive 2006/11/EC:** None
· **European Water Framework Directive 2000/60/EC (WFD) dated 23.10.2000:**
The product does not contain any priority substances according WFD that require a water monitoring.
· **Absorbable organic halogen compounds (AOX - DIN EN ISO 9562):**
Can affect the AOX-value of the effluent water.
AOX (DIN 38409 H 14): 0.7 %

*

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must be specially treated under adherence to official regulations.
Appropriate disposal operations according to Directive 2008/98/EC on waste: D 10 Incineration on land

· **European waste catalogue**	
16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 03 00	off-specification batches and unused products
16 03 05*	organic wastes containing hazardous substances
HP 4	Irritant - skin irritation and eye damage
HP 14	Ecotoxic

· **Contaminated packaging:**
· **Recommendation:** Remove all product from packaging and clean thoroughly before recycling.
· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

*

SECTION 14: Transport information

· **14.1 UN-Number**
· **ADR, IMDG, IATA** UN3265

· **14.2 UN proper shipping name**
· **ADR** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-methylisothiazol-3(2H)-one, 1,2-benzisothiazol-3(2H)-one), ENVIRONMENTALLY HAZARDOUS
· **IMDG** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-methylisothiazol-3(2H)-one, 1,2-benzisothiazol-3(2H)-one), MARINE POLLUTANT
· **IATA** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-methylisothiazol-3(2H)-one, 1,2-benzisothiazol-3(2H)-one)

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 9)

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class**	8 (C3) Corrosive substances.
· **Label**	8

· **IMDG**

· **Class**	8 Corrosive substances.
· **Label**	8

· **IATA**

· **Class**	8 Corrosive substances.
· **Label**	8
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Corrosive substances.
· **Kemler Number:**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	Acids
· **Stowage Category**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **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: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **Transport category**	2
· **Tunnel restriction code**	E

(Contd. on page 11)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 10)

· **IMDG**
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· **IATA**
· **Remarks:** Packing Instructions / max. net weight: Passenger aircraft: 851 / 1 L; Cargo aircraft: 855 / 30 L
· **UN "Model Regulation":** UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-METHYLISOTHIAZOL-3(2H)-ONE, 1,2-BENZISOTHIAZOL-3(2H)-ONE), 8, II, ENVIRONMENTALLY HAZARDOUS

*
SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** E1 Hazardous to the Aquatic Environment
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
· **National regulations:**

· **Information about limitation of use:**
Take note of Directive 94/33/EC on the protection of young people at work.
Take note of Directive 92/85/EC on the safety and health of pregnant women at work.

· **Regulations which may apply in event of accident: Control of Major Accident Hazards (COMAH)**
Critical quantity values according to the regulations on accidents (Seveso Directive) should be adhered to.
· **PCS-no. (IRL):** 93926
· **Indication of VOC:**
· **VOC according to Directive 2010/75/EC:**
This product does not contain any relevant amounts of "Volatile Organic Compounds" (VOC).
· **VOC according to Decopaint Directive (2004/42/EC):**
The product does not contribute significantly to the total content of VOCs in paints and varnishes.
· **SVOC according to EU-Ecolabel for interior and exterior paints (2014/312/EU):**
Based on its dose level, the product does not contribute significantly to the total level of SVOC of paints and lacquers.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This data is based on our current knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

(Contd. on page 12)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.07.2016 Version number 59 Revision: 05.07.2016

Trade name: ACTICIDE MBL

(Contd. of page 11)

· **Relevant phrases**
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

· **Training hints**
Further information regarding the directions for use can be found in the Product Data Sheet.

· **Classification according to Regulation (EC) No 1272/2008**
The classification includes the relevant available information about the mixture or the substances contained therein.
The evaluation of the available information within the scope of classification refers to the forms and aggregate states in which the mixture has been placed on the market and will be used most likely.
The classification of that mixture was made:
on the basis of test data (X)
by application of bridging principles (-)
by application of calculation methods (X)

· **Contact for technical information:** Biocides: info@thor.uk.com

· **Abbreviations and acronyms:**
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
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

· **Key literature references and sources for data:**
Data source(s): Biocidal product dossier(s)
Own studies (reference to S-number).

· *** Data altered since the previous version.**