

# Safety Data Sheet

according to UK REACH Regulation

## Bluing solution for stainless steel

Revision date: 25.08.2023

Product code: 0263

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

#### 1.1. Product identifier

Bluing solution for stainless steel

UFI: TTCG-HRNS-H00Q-W338

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

##### Use of the substance/mixture

Liquid for burnishing (blackening) stainless steel.

##### Uses advised against

Never use on light metals (e.g. aluminium, zinc) - risk of release of highly toxic hydrogen selenide!

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

Company name: MARAWE GmbH & Co. KG  
Street: Donaustauer Str. 378 - Gebäude 64  
Place: D-93055 Regensburg  
Telephone: +49 941 / 29020439      Telefax: +49 941 / 29020593  
e-mail: info@marawe.de  
Contact person: Product safety department  
Internet: www.marawe.de

#### 1.4. Emergency telephone number:

+49 941 / 29020439,  
Mon-Thu 9:00 - 16:00; Fri 9:00 - 14:00

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GB CLP Regulation

Met. Corr. 1; H290  
Acute Tox. 4; H302  
Skin Corr. 1; H314  
Eye Dam. 1; H318  
STOT SE 3; H335  
Aquatic Acute 1; H400  
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

#### 2.2. Label elements

##### GB CLP Regulation

##### Hazard components for labelling

hydrochloric acid  
selenious acid  
copper sulphate pentahydrate

Signal word: Danger

##### Pictograms:



##### Hazard statements

H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

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H400 Very toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash skin thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.  
P310 Immediately call a POISON CENTER/doctor.  
P405 Store locked up.  
P501 Dispose of contents/container to an appropriate recycling or disposal facility according to local/national regulations.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7647-01-0	hydrochloric acid			10 - < 15 %
	231-595-7		01-2119484862-27	
	Met. Corr. 1, Skin Corr. 1A, STOT SE 3; H290 H314 H335			
7783-00-8	selenious acid			5 - < 10 %
	231-974-7			
	Acute Tox. 3, Acute Tox. 3, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H331 H301 H373 H400 H410			
7758-99-8	copper sulphate pentahydrate			1.9 - < 5 %
	231-847-6		01-2119520566-40	
	Acute Tox. 4, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H318 H400 H410			
7664-38-2	phosphoric acid			< 1 %
	231-633-2		01-2119485924-24	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H290 H302 H314 H318			

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

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#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
7647-01-0	231-595-7	hydrochloric acid	10 - < 15 %
		dermal: LD50 = > 5010 mg/kg Skin Corr. 1A; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100	
7783-00-8	231-974-7	selenious acid	5 - < 10 %
		inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); oral: ATE = 100 mg/kg	
7758-99-8	231-847-6	copper sulphate pentahydrate	1.9 - < 5 %
		oral: LD50 = 481 mg/kg M acute; H400: M=10	
7664-38-2	231-633-2	phosphoric acid	< 1 %
		dermal: LD50 = 2740 mg/kg; oral: LD50 = 850 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Be careful with contaminated clothes and shoes of the victim - they could still contain the product. This product contains selenium dioxide. Selenium dioxide can be absorbed by skin and can damage the nerves. Absolutely avoid contaminations.

#### After inhalation

Remove casualty to fresh air and keep warm and at rest. When in doubt or if symptoms are observed, get medical advice.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do.

#### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

Burning and aching eyes, skin and mucous membranes. In case of ingestion, strong irritation of oral cavities and throat as well as danger of perforation of the gullet.

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

After inhalations of vapours, inhale dexamethasone spray (Auxiloson).

In case of oral uptake: do not use sodium hydrogen carbonate NaHCO<sub>3</sub> or calcium carbonate CaCO<sub>3</sub> for neutralisation, because the created carbon dioxide CO<sub>2</sub> can lead to perforation of the stomach. Make slowly drink magnesium oxide MgO suspended in water.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

If there is a risk of pollution of ground- or surface water, do not extinguish with water.

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

Ambient fire may liberate hazardous vapours. Upon heating and in case of fire, the following may be released: Hydrogen chloride (HCl), Sulphur oxides (SOx), metal oxide vapours.

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. In case of release of larger quantities, inform the responsible authorities.

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

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

**For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Take off contaminated clothing and wash it before reuse.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Unsuitable container/equipment material: Metal.

**Hints on joint storage**

Do not store together with: Base, Peroxides, Oxidizing agent.

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**Further information on storage conditions**

Use acid-proof bottom.

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

Liquid for burnishing (blackening) stainless steel.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
-	Selenium and compounds, except hydrogen selenide (as Se)	-	0.1		TWA (8 h)	WEL

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
7647-01-0	hydrochloric acid			
Worker DNEL, acute		inhalation	local	15 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	8 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	15 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	8 mg/m <sup>3</sup>
7664-38-2	phosphoric acid			
Worker DNEL, acute		inhalation	local	2 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	1 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	10,7 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	0,36 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	4,57 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,1 mg/kg bw/day

**PNEC values**

CAS No	Substance	Value
7647-01-0	hydrochloric acid	
	Freshwater	0,036 mg/l
	Marine water	0,036 mg/l
	Micro-organisms in sewage treatment plants (STP)	0,036 mg/l

**8.2. Exposure controls**

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#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Tight sealing protective goggles (DIN EN 166).

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### Skin protection

Use of protective clothing.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.  
Recommended filter type: B (inorganic gases and vapours)

## SECTION 9: Physical and chemical properties

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

Physical state: Liquid  
Colour: green

#### Changes in the physical state

Melting point/freezing point: not determined  
Boiling point or initial boiling point and boiling range: not determined  
Flash point: not determined

#### Flammability

Solid/liquid: not applicable  
Gas: not applicable

#### Explosive properties

The product is not: Explosive.

Lower explosion limits: not determined  
Upper explosion limits: not determined  
Auto-ignition temperature: not determined  
Decomposition temperature: not determined  
pH-Value (at 20 °C): -0,5  
Water solubility: easily soluble

#### Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined  
Vapour pressure: not determined  
Density (at 20 °C): 1,1 g/cm<sup>3</sup>

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Relative vapour density: not determined

**9.2. Other information****Information with regard to physical hazard classes**

Oxidizing properties

The product is not: oxidising.

**Other safety characteristics**

Solid content: not determined

Evaporation rate: not determined

**Further Information****SECTION 10: Stability and reactivity****10.1. Reactivity**

Corrosive to metals.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Exothermic reaction with: Base, Peroxides, Oxidizing agent.

Never use on light metals (e.g. aluminium, zinc) - risk of release of highly toxic hydrogen selenide!

**10.4. Conditions to avoid**

Avoid high temperatures or direct sunlight.

**10.5. Incompatible materials**

Metal. Keep away from: Base, Oxidizing agent, Peroxides.

**10.6. Hazardous decomposition products**

Hydrogen chloride (HCl) may be released when exposed to heat.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

Harmful if swallowed.

**ATEmix calculated**

ATE (oral) 1237,7 mg/kg

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7647-01-0	hydrochloric acid				
	dermal	LD50 > 5010 mg/kg	Rabbit	Manufacturer	
7783-00-8	selenious acid				
	oral	ATE 100 mg/kg			
	inhalation vapour	ATE 3 mg/l			
	inhalation dust/mist	ATE 0,5 mg/l			
7758-99-8	copper sulphate pentahydrate				
	oral	LD50 481 mg/kg	Rat	ECHA	OECD 401
7664-38-2	phosphoric acid				
	oral	LD50 850 mg/kg	Rat	Manufacturer	
	dermal	LD50 2740 mg/kg	Rabbit	Manufacturer	

**Irritation and corrosivity**

Causes severe skin burns and eye damage.

Causes serious eye damage.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

**STOT-single exposure**

May cause respiratory irritation. (hydrochloric acid)

**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.

**Further information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information**
**12.1. Toxicity**

Toxic to aquatic life with long lasting effects.



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7647-01-0	hydrochloric acid					
	Acute fish toxicity	LC50 mg/l	3,25	96 h	Lepomis macrochirus (Bluegill)	Manufacturer
	Acute crustacea toxicity	EC50 mg/l	4,92	48 h	Daphnia magna (Big water flea)	Manufacturer
	Acute bacteria toxicity	(EC50 mg/l)	0,23		Activated sludge	Manufacturer OECD 209
7783-00-8	selenious acid					
	Acute fish toxicity	LC50 mg/l	2,06	96 h	Pimephales promelas (fathead minnow)	ECHA registration dossier EPA OPP 72-1
	Acute algae toxicity	ErC50 mg/l	15,57	72 h	Selenastrum capricornutum	ECHA registration dossier OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,55	48 h	Daphnia magna (Big water flea)	ECHA registration dossier EPA-660/3-75-00 9
	Fish toxicity	NOEC mg/l	0,021	90 d	Oncorhynchus mykiss (Rainbow trout)	ECHA registration dossier
	Crustacea toxicity	NOEC mg/l	0,07	28 d	Daphnia magna (Big water flea)	ECHA registration dossier OECD 211
7758-99-8	copper sulphate pentahydrate					
	Acute fish toxicity	LC50 mg/l	0,073	96 h	Oncorhynchus mykiss (Rainbow trout)	ECHA
7664-38-2	phosphoric acid					
	Acute fish toxicity	LC50	3 mg/l	96 h	Lepomis macrochirus (Bluegill)	Manufacturer
	Acute algae toxicity	ErC50 mg/l	>100	72 h	Desmodesmus subspicatus	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Acute bacteria toxicity	(EC50 mg/l)	>1000	3 h	Activated sludge	Manufacturer OECD 209

#### 12.2. Persistence and degradability

The product has not been tested.

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7647-01-0	hydrochloric acid	< 1

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

No information available.

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**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**List of Wastes Code - residues/unused products**

110105 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); pickling acids; hazardous waste

**List of Wastes Code - used product**

110105 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); pickling acids; hazardous waste

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 3264
<b>14.2. UN proper shipping name:</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS SELENOUS ACID, HYDROCHLORIC ACID, PHOSPHORIC ACID)
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8



Classification code:	C1
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 3264
<b>14.2. UN proper shipping name:</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS SELENOUS ACID, HYDROCHLORIC ACID, PHOSPHORIC ACID)
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8

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Classification code:	C1
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2

#### Marine transport (IMDG)

<b>14.1. UN number or ID number:</b>	UN 3264
<b>14.2. UN proper shipping name:</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS SELENOUS ACID, HYDROCHLORIC ACID, PHOSPHORIC ACID)
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8



Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-A, S-B

#### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number:</b>	UN 3264
<b>14.2. UN proper shipping name:</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS SELENOUS ACID, HYDROCHLORIC ACID, PHOSPHORIC ACID)
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8



Special Provisions:	A3 A803
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y840
Excepted quantity:	E2
IATA-packing instructions - Passenger:	851
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	855
IATA-max. quantity - Cargo:	30 L

#### 14.6. Special precautions for user

Warning: strongly corrosive.

#### 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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

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Information according to 2012/18/EU  
(SEVESO III):

E1 Hazardous to the Aquatic Environment

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

3 - highly hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Abbreviations and acronyms**

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

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)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation  
intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Acute Tox. 4; H302	Calculation method
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
STOT SE 3; H335	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 2; H411	Calculation method

**Relevant H and EUH statements (number and full text)**

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*