

Chloride Tablet Count

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

1.1 - Product identifier

Trade name/designation Chloride Tablet Count

Chemical name

Product-type Mixture

Product code TbsRCD

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

Relevant identified uses - Reagent for water analysis

1.3 - Details of the supplier of the safety data sheet

Water-I.D. GmbH

Daimlerstr. 20

76344 Eggenstein Germany

Telephone : +49 (0) 721 - 78 20 29 - 0 Fax +49 (0) 721 - 78 20 29 - 11

Website www.water-id.com

EHS / Compliance: lab@water-id.com

1.4 - Emergency telephone number

- Poison Control Center Munich

Tel: +49 (0) 89 / 19 24 0

Germany

24 hour service

Languages: German, English

please also call from: United Kingdom

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Skin Corr. 1B	Skin corrosion, Category 1B
Eye Dam. 1	Serious eye damage, Category 1
Muta. 1B	Germ cell mutagenicity - Category 1B
Carc. 1B	Carcinogenicity - Category 1B
Repr. 1B	Reproductive toxicity - Category 1B
Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1
Skin Sens. 1	Skin sensitization - Category 1

2.2 - Label elements

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

Contains: silver nitrate (CAS No.: 7761-88-8)||potassium chromate (CAS No.: 7789-00-6)||potassium dichromate (CAS No.: 7778-50-9)

Signal word : Danger

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Hazard pictograms



Hazard statements

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H340	May cause genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.
P261	Avoid breathing dust.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection.
P301+P312	If swallowed: Call a POISON CENTER, a doctor if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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, a doctor.
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents, container to an appropriate recycling or disposal facility.
EUH-phrases	
EUH208	Contains potassium dichromate (7778-50-9) potassium chromate (7789-00-6) . May produce an allergic reaction

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2.3 - Other hazards

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
silver nitrate	CAS No. : 7761-88-8 Index No. : 047-001-00-2 EC No. : 231-853-9 REACH No. : 01-2119513705-43-XXXX	1 - 10	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Ox. Sol. 2 - H272 Skin Corr. 1B - H314	Not applicable
potassium chromate	CAS No. : 7789-00-6 Index No. : 024-006-00-8 EC No. : 232-140-5 REACH No. : 01-2119543478-30-XXXX	1 - 10	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Carc. 1B - H350 Eye Irrit. 2 - H319 Muta. 1B - H340 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 (H335) - H335	Skin Sens. 1 - H317 : 0,5>=%<=100
potassium dichromate	CAS No. : 7778-50-9 Index No. : 024-002-00-6 EC No. : 231-906-6 REACH No. : 01-2119454792-32-XXXX	0 - 1	Acute Tox. 2 Inhalation - H330 Acute Tox. 3 Oral - H301 Acute Tox. 4 Dermal - H312 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Carc. 1B - H350 Muta. 1B - H340 Ox. Sol. 2 - H272 Repr. 1B - H360 Resp. Sens. 1 - H334 Skin Corr. 1B - H314 Skin Sens. 1 - H317 STOT RE 1 - H372	STOT SE 3 (H335) - H335 : 5>=%<=100

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation

- Provide fresh air.
- When in doubt or if symptoms are observed, get medical advice.

Following skin contact

- After contact with skin, wash immediately with plenty of water and soap.
- Remove contaminated, saturated clothing immediately.
- In case of skin reactions, consult a physician.

After eye contact

- 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.

After ingestion

- If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.
- Seek medical advice immediately.
- Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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- Rinse mouth thoroughly with water.
- Medical treatment necessary.
- When in doubt or if symptoms are observed, get medical advice.

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

Symptoms and effects - Following inhalation - No information available.

Symptoms and effects - Following skin contact - Causes skin irritation.

Symptoms and effects - After eye contact - Serious eye damage/eye irritation

Symptoms and effects - After ingestion - No information available.

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

- Treat symptomatically. Antidotal dispensation.
- Treat symptomatically.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing media - Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture - No information available.

Hazardous decomposition products

- Carbon dioxide (CO₂)
- Carbon monoxide
- Sulphur oxides
- Nitrogen oxides (NO_x)
- metallic oxides containing heavy metals

5.3 - Advice for firefighters

- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
- Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel - Use personal protection equipment.

For emergency responders - No information available.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.

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- Ensure waste is collected and contained.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment

- Soak up inert absorbent and dispose as waste requiring special attention.

Methods and material for cleaning up

- Take up mechanically, placing in appropriate containers for disposal.
- Avoid dust formation.
- Clear contaminated areas thoroughly.
- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Take up carefully when dry.
- Clean contaminated articles and floor according to the environmental legislation.

Inappropriate techniques

- No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation

- Avoid: Eye contact
- Avoid: Generation/formation of dust
- It is recommended to design all work processes always so that the following is excluded: Eye contact
- It is recommended to design all work processes always so that the following is excluded: Skin contact
- It is recommended to design all work processes always so that the following is excluded: Inhalation of dust/particles
- After use replace the closing cap immediately.
- Avoid exposure - obtain special instructions before use.
- Avoid: Skin contact

Advices on general occupational hygiene

- Wash contaminated clothing prior to re-use.
- When using do not eat, drink, smoke, sniff.
- Thorough skin-cleansing after handling the product.
- Wash hands before breaks and after work.

7.2 - Conditions for safe storage, including any incompatibilities

- Store in a place accessible by authorized persons only.
- Keep away from: Food and feedingstuffs
- Only use containers specifically approved for the substance/product.
- Storage class Non-combustible substances of acute toxicity, category 1 and 2 / very toxic substances (solid)
- Do not store together with: Food and feedingstuffs

7.3 - Specific end use(s)

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SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

8.2 - Exposure controls

Appropriate engineering controls - No information available.

Individual protection measures, such as personal protective equipment - Suitable protective clothing: lab coat



- Suitable eye protection: Eye glasses with side protection



- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.



- Suitable material: NBR (Nitrile rubber)

- Barrier creams are not substitutes for body protection.

Environmental exposure controls - Further information: see technical data sheet.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

<u>Physical state</u>	Solid	<u>Appearance</u>	Tablets
<u>Colour</u>	brown	<u>Odour</u>	odourless
Odour threshold		No data available	
pH		7 1 g/l	
Melting point		No data available	
Freezing point		No data available	
Boiling point		No data available	
Flash point		No data available	
Evaporation rate		No data available	
flammability		No data available	
Lower explosion limit		No data available	
Upper explosion limit		No data available	
Vapour pressure		No data available	
Vapour density		No data available	
Relative density		No data available	

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Density	No data available
Solubility (Water)	20 %
Solubility (Ethanol)	No data available
Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Acute toxicity (oral) - Category 4 - Harmful if swallowed

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

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- No information available.

Toxicity : Substances

silver nitrate (7761-88-8)	
LD50 oral (rat)	1173 mg/kg
potassium chromate (7789-00-6)	
LD50 oral (rat)	168 mg/kg ECHA
LD50 dermal (rabbit)	2000 mg/kg
LC50 inhalation dusts and mists (rat)	83 mg/l < V < 99 mg/l ECHA 4h
potassium dichromate (7778-50-9)	
LD50 oral (rat)	67 mg/kg < V < 168 mg/kg ECHA
LD50 dermal (rabbit)	14 mg/kg
LC50 inhalation dusts and mists (rat)	83 mg/l < V < 99 mg/l ECHA 4h

Skin corrosion/irritation - Skin corrosion, Category 1B - Causes severe skin burns and eye damage

- Corrosive.

Serious eye damage/eye irritation - Serious eye damage, Category 1

- Risk of serious damage to eyes.
- Causes serious eye irritation.
- Corrosive.

Respiratory or skin sensitisation - Skin sensitization - Category 1 - May cause an allergic skin reaction

- May cause sensitization by skin contact.
- May cause an allergic skin reaction.

Germ cell mutagenicity - Germ cell mutagenicity - Category 1B - May cause genetic defects

Carcinogenicity - Carcinogenicity - Category 1B - May cause cancer

Reproductive toxicity - Reproductive toxicity - Category 1B - May damage fertility or the unborn child

STOT-single exposure - Not classified

- data lacking

STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
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LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

Toxicity : Substances

silver nitrate (7761-88-8)	
EC50 48 hr crustacea	0,0067 mg/l
LC50 96 hr fish	0,0069 mg/l < V < 0,0082 mg/l
NOEC chronic fish	0,00037 mg/l
potassium chromate (7789-00-6)	
EC50 48 hr crustacea	15 mg/l Daphnia magna
LC50 96 hr fish	40 mg/l Pimephales promelas
ErC50 algae	0,26 mg/l 72h / Nitzschia sp.
potassium dichromate (7778-50-9)	
EC50 48 hr crustacea	0,035 mg/l Daphnia magna
LC50 96 hr fish	0,131 mg/l Lepomis macrochirus
ErC50 algae	0,31 mg/l Pseudokrichneriella subcapitata 72h
NOEC chronic fish	6 mg/l Pimephales promelas 7d
NOEC chronic crustacea	0,016 mg/l < V < 0,064 mg/l Daphnia magna 7d

- Very toxic to aquatic life.
- Very toxic to aquatic life with long lasting effects.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

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12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

<u>Waste treatment methods</u>	- Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
<u>Sewage disposal</u>	- Do not empty into drains.
<u>Special precautions for waste treatment</u>	<ul style="list-style-type: none">- Waste for disposal is to be classified and labelled.- Do not mix with other wastes.- Consult the appropriate local waste disposal expert about waste disposal.- Waste requires special monitoring.- Collect the waste separately.- Send to a hazardous waste incinerator facility under observation of official regulations.- The waste is to be kept separate from other types of waste until its disposal.
<u>Community or national or regional provisions</u>	- Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

<u>UN number (ADR)</u>	:	UN1759
<u>UN number (RID)</u>	:	UN1759
<u>UN number (ADN)</u>	:	UN1759
<u>UN number (IMDG)</u>	:	UN1759
<u>UN number (IATA)</u>	:	UN1759

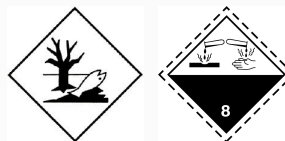
14.2 - UN proper shipping name

<u>UN proper shipping name (ADR)</u>	:	CORROSIVE SOLID, N.O.S. (silver nitrate, Lithium hydroxide monohydrate, potassium dichromate)
<u>UN proper shipping name (RID)</u>	:	CORROSIVE SOLID, N.O.S. (silver nitrate, Lithium hydroxide monohydrate, potassium dichromate)
<u>UN proper shipping name (ADN)</u>	:	CORROSIVE SOLID, N.O.S. (silver nitrate, Lithium hydroxide monohydrate, potassium dichromate)
<u>UN proper shipping name (IMDG)</u>	:	CORROSIVE SOLID, N.O.S. (silver nitrate, Lithium hydroxide monohydrate, potassium dichromate)
<u>UN proper shipping name (IATA)</u>	:	CORROSIVE SOLID, N.O.S. (silver nitrate, Lithium hydroxide monohydrate, potassium dichromate)

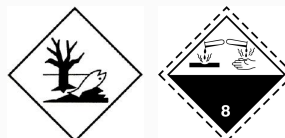
14.3 - Transport hazard class(es)

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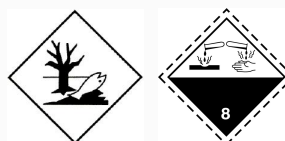
ADR Transport hazard class(es) : 8
ADR Classification code: : C10
Pictograms



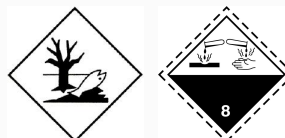
Transport hazard class(es) (RID) : 8
Pictograms



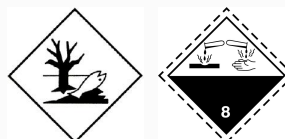
Transport hazard class(es) (ADN) : 8
Pictograms



Transport hazard class(es) (IMDG) : 8
Pictograms



Transport hazard class(es) (IATA) : 8
Pictograms



14.4 - Packing group

Packing group : II
Packing group (RID) : II
Packing group (ADN) : II
Packing group (IMDG) : II
Packing group (IATA) : II

14.5 - Environmental hazards

Environmental hazards : Yes.
Marine pollutant : Hazardous to the aquatic environment - Aquatic Acute 1
Hazardous to the aquatic environment - Aquatic Chronic 1

14.6 - Special precautions for user

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ADR

<u>ADR Classification code:</u>	:	C10
<u>ADR Special provisions</u>	:	274
<u>ADR Limited quantity (LQ)</u>	:	1 kg
<u>ADR Excepted quantities</u>	:	E2
<u>ADR Packing instructions</u>	:	P002 IBC08
<u>ADR Special packing provisions</u>	:	B4
<u>ADR Mixed packing provisions</u>	:	MP10
<u>Instructions for portable tanks and bulk containers</u>	:	T3
<u>Special provisions for portable tanks and bulk containers</u>	:	TP33
<u>ADR tank code</u>	:	SGAN L4BN
<u>ADR tanks special provisions</u>	:	
<u>Vehicle for tank carriage</u>	:	AT
<u>ADR Transport category</u>	:	2
<u>ADR Tunnel restriction code</u>	:	E
<u>ADR Special provisions loading, unloading and handling</u>	:	
<u>Special provisions - Packages</u>	:	V11
<u>Special provisions - Bulk</u>	:	
<u>Special provisions - Operation</u>	:	
<u>ADR Hazard identification number (Kemler No.)</u>	:	80

RID

<u>Special provisions</u>	:	
<u>Limited quantity (LQ)</u>	:	
<u>Excepted quantities</u>	:	

ADN

<u>Special provisions</u>	:	
<u>Limited quantity (LQ)</u>	:	
<u>Excepted quantities</u>	:	

IMDG

<u>Special provisions</u>	:	
<u>Limited quantity (LQ)</u>	:	
<u>Excepted quantities</u>	:	
<u>Packing instructions</u>	:	
<u>Special packing provisions</u>	:	
<u>IBC instruction(s)</u>	:	
<u>IBC provisions</u>	:	
<u>Instructions for portable tanks and bulk containers</u>	:	
<u>Special provisions for portable tanks and bulk containers</u>	:	
<u>EmS codes</u>	:	
<u>Stowage and handling</u>	:	
<u>Segregation</u>	:	
<u>Properties and observations</u>	:	

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IATA

<u>PCA - Excepted quantities</u>	:
<u>PCA - Limited Quantity - Packing Instructions</u>	:
<u>PCA - Limited Quantity - Maximum Net Quantity per Package</u>	:
<u>PCA - Packing Instructions</u>	:
<u>PCA - Maximum Net Quantity per Package</u>	:
<u>CAO - Packing Instructions</u>	:
<u>CAO - Maximum Net Quantity per Package</u>	:
<u>Special Provisions</u>	:
<u>ERG Code</u>	:

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

SECTION 15: Regulatory information

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

<u>Substances REACH candidates</u>	potassium chromate (Index No.: 024-006-00-8 - EC No.: 232-140-5 - CAS No.: 7789-00-6) potassium dichromate (Index No.: 024-002-00-6 - EC No.: 231-906-6 - CAS No.: 7778-50-9)
<u>Substances Annex XIV</u>	potassium chromate (Index No.: 024-006-00-8 - EC No.: 232-140-5 - CAS No.: 7789-00-6) potassium dichromate (Index No.: 024-002-00-6 - EC No.: 231-906-6 - CAS No.: 7778-50-9)
<u>Substances Annex XVII</u>	None
<u>VOC content</u>	No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

Version	Issue date	Description of the amendments
1	18.12.2018	MSDS creation.

Abbreviations and acronyms - See overview table at www.euphrac.eu

Texts of the regulatory sentences

Acute Tox. 2 Inhalation	Acute toxicity (inhalative) - Category 2
Acute Tox. 3 Oral	Acute toxicity (oral) - Category 3
Acute Tox. 4 Dermal	Acute toxicity (dermal) - Category 4
Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Aquatic Chronic 1
Carc. 1B	Carcinogenicity - Category 1B
Eye Dam. 1	Serious eye damage, Category 1

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Eye Irrit. 2	Eye irritation - Category 2
H272	May intensify fire; oxidiser
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
H319	Causes serious eye irritation
H330	Fatal if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects
H350	May cause cancer
H350i	May cause cancer by inhalation
H360	May damage fertility or the unborn child
H360F	May damage fertility
H372	Causes damage to organs or state all organs affected, if known through prolonged or repeated exposure - state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
Muta. 1B	Germ cell mutagenicity - Category 1B
Ox. Sol. 2	Oxidising solids - Category 2
Repr. 1B	Reproductive toxicity - Category 1B
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Irritation, Category 2
Skin Sens. 1	Skin sensitization - Category 1
STOT RE 1	STOT-repeated exposure - Category 1
STOT SE 3 (H335)	STOT-single exposure - Category 3 (H335)

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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