

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

Printing date 27.10.2023

Version number 19 (replaces version 18)

Revision: 27.10.2023

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

· **1.1 Product identifier**

· **Product name:** Chloride-30

· **Catalog number:** 424339, 424339-0

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

· **Application of the substance / the preparation:** Reagent for water analysis

· **1.3 Details of the supplier of the safety data sheet**

· **Supplier:**

Tintometer GmbH
Schleefstraße 8-12
44287 Dortmund
Made in Germany
www.lovibond.com

phone: +49 (0)231 94510-0
e-mail: sales@lovibond.com

The Tintometer Limited
Lovibond® House
Sun Rise Way
Amesbury
Wiltshire SP4 7GR
United Kingdom

phone : +44 1980 664800
e-mail: SDS@lovibond.uk

· **Informing department:**

e-mail: sds@lovibond.com
Product Safety Department

· **1.4 Emergency telephone number:**

+44 1235 239670
Languages: English

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS06 skull and crossbones

Acute Tox. 2 H310 Fatal in contact with skin.



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Met. Corr. 1 H290 May be corrosive to metals.
Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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GHS07

Acute Tox. 4 H302 Harmful if swallowed.
 Acute Tox. 4 H332 Harmful if inhaled.
 Skin Irrit. 2 H315 Causes skin irritation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms

GHS05



GHS06



GHS08



GHS09

· **Signal word** Danger**Hazard-determining components of labelling:**

nitric acid 4.3%

mercury nitrate monohydrate

Hazard statements

H290 May be corrosive to metals.

H302+H332 Harmful if swallowed or if inhaled.

H310 Fatal in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection.

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.

· **2.3 Other hazards** CAS 7783-34-8: Danger by skin resorption.**Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

Determination of endocrine-disrupting properties

The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2 Mixtures· **Description:** aqueous solution**Dangerous components:**

The percent content of the mercury compound mentioned below refers to the amount of the pure mercury therein.

CAS: 7783-34-8 EINECS: 233-886-4 Index No: 080-002-00-6	mercury nitrate monohydrate ⚠ Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; ⚠ STOT RE 2, H373; ⚠ Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1) Specific concentration limit: STOT RE 2; H373: C ≥ 0.1 %	2.5–5%
CAS: 7697-37-2 EINECS: 231-714-2 Index No: 007-030-00-3 Reg.nr.: 01-2119487297-23-XXXX	nitric acid ⚠ Ox. Liq. 3, H272; ⚠ Acute Tox. 3, H331; ⚠ Met. Corr. 1, H290; Skin Corr. 1A, H314, EUH071 ATE: LC50/4h inhalative: 2.65 mg/l Specific concentration limits: Ox. Liq. 3; H272: C ≥ 65 % Skin Corr. 1A; H314: C ≥ 20 % Skin Corr. 1B; H314: 5 % ≤ C < 20 %	2.5–<5%

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

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information**

Personal protection for the First Aider!

Instantly remove any clothing soiled by the product.

· **After inhalation** Supply fresh air or oxygen; call for doctor.

· **After skin contact**

Instantly wash with water and soap and rinse thoroughly.

Get medical advice/attention.

· **After eye contact**

Rinse opened eye for several minutes (at least 15 min) under running water.

Call a doctor immediately.

· **After swallowing**

Rinse out mouth and then drink 1-2 glasses of water.

Seek medical treatment.

· **4.2 Most important symptoms and effects, both acute and delayed:**

Irritation and corrosion

damage to the affected mucous membranes possible

after swallowing and inhalation:

metallic taste

sickness

vomiting

bloody diarrhoea

pain

after absorption of large amounts:

methaemoglobinaemia

· **Danger**

Danger of system failure.

Danger of disturbed cardiac rhythm.

Danger of pulmonary oedema.

Risk of serious damage to eyes.

· **4.3 Indication of any immediate medical attention and special treatment needed:**

Subsequent observation for pneumonia and pulmonary oedema

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

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

The product is not combustible.

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

nitrous gases

Nitrogen oxides (NOx)

mercury vapours

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

· **Additional information**

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Ambient fire may liberate hazardous vapours.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
- **Advice for non-emergency personnel:**
Wear protective equipment. Keep unprotected persons away.
Avoid substance contact.
Ensure adequate ventilation
Use breathing protection against the effects of fumes/dust/aerosol.
- **Advice for emergency responders:** Protective equipment: see section 8
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or water bodies.
Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, universal binders).
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
- **Advice on safe handling:**
Open and handle container with care.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Hygiene measures:**
Do not get in eyes, on skin, or on clothing.
Do not inhale gases / fumes / aerosols.
Take off immediately all contaminated clothing.
Store protective clothing separately.
Wash hands during breaks and at the end of the work.
Do not eat, drink or smoke when using this product.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and containers:**
Store in cool location.
Keep only in original packaging.
- **Information about storage in one common storage facility:**
Store away from metals.
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
Store in a locked cabinet or with access restricted to technical experts or their assistants.
Keep container tightly sealed.
Protect from heat and direct sunlight.
Protect from the effects of light.
Protect from humidity and keep away from water.
- **Recommended storage temperature:** 20°C +/- 5°C
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Components with limit values that require monitoring at the workplace:

CAS: 7783-34-8 mercury nitrate monohydrate

WEL (Great Britain)	Long-term value: 0.02 mg/m ³ as Hg
BOELV (European Union)	Long-term value: 0.02 mg/m ³ as Hg

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IOELV (European Union)	Long-term value: 0.02 mg/m ³ as Hg
CAS: 7697-37-2 nitric acid	
WEL (Great Britain)	Short-term value: 2.6 mg/m ³ , 1 ppm
IOELV (European Union)	Short-term value: 2.6 mg/m ³ , 1 ppm

- **Regulatory information**

WEL (Great Britain): EH40/2020
BOELV (European Union): EU 2022/431
IOELV (European Union): (EU) 2019/1831

- **Recommended monitoring procedures:**

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

- **Ingredients with biological limit values:**

- **CAS: 7783-34-8 mercury nitrate monohydrate**

BMGV (Great Britain)	20 µmol/mol creatinine Medium: urine Sampling time: random Parameter: mercury
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- **Regulatory information** BMGV (Great Britain): EH40/2011

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **8.2 Exposure controls**

- **Engineering measures:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.

- **Individual protection measures, such as personal protective equipment**

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.

- **Eye/face protection**

Tightly sealed safety glasses.

Use safety glasses that have been tested and approved in accordance with government standards such as EN 166.

- **Hand protection**

Protective gloves.

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves**

nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

- **Penetration time of glove material**

Value for the permeation: Level = 1 (< 10 min)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Other skin protection (body protection):** Protective work clothing.

- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.

- **Recommended filter device for short term use:** Special gas filter Hg-P3

- **Environmental exposure controls** Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

· Physical state	Fluid
· Form:	Solution
· Colour:	Colourless
· Odour:	Odourless
· Odour threshold:	Not applicable.
· Melting point/Freezing point:	Not determined.
· Boiling point or initial boiling point and boiling range	Not determined.
· Flammability	The product is not combustible.
· Explosive properties:	Product is not explosive.

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· Lower and upper explosion limit	
Lower:	Not applicable.
Upper:	Not applicable.
· Flash point:	Not applicable.
· Auto-ignition temperature:	Not applicable.
· Decomposition temperature:	Not determined.
· pH at 20°C	< 1
	Strongly acidic
· Kinematic viscosity	Not determined.
· Solubility	
· Water:	Fully miscible
· Partition coefficient n-octanol/water (log value)	Not applicable (mixture).
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20°C:	1.03 g/cm ³
· Relative density:	Not determined.
· Relative gas density	Not determined.
· Particle characteristics	Not applicable (liquid).
9.2 Other information	
· Information with regard to physical hazard classes	
· Corrosive to metals	May be corrosive to metals.
· Metals that are corroded by the substance or mixture	Information on incompatible materials can be found in Sections 7 and 10.
· Other safety characteristics	
· Oxidising properties:	none
· Additional information	
· Solids content:	< 5 %
· Solvent content:	
· Organic solvents:	0 %
· Water:	> 90 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section 10.3
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
 - Corrosive action on metals
 - Reacts with metals forming hydrogen (Danger of explosion in case of large amounts!)
 - Reacts with reducing agents
 - Reacts with acids and alkali (lyes).
 - Reacts with ammonia (NH₃).
- **10.4 Conditions to avoid** Strong heating (decomposition)
- **10.5 Incompatible materials:**
 - metals
 - alkali metals
 - organic solvents
 - organic substances
- **10.6 Hazardous decomposition products:** see section 5

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**
 - Classification according to calculation procedure:
 - Harmful if swallowed or if inhaled.
 - Fatal in contact with skin.

· Acute toxicity estimate (ATE_(MIX)) - Calculation method:		
Oral	CLP ATE _(MIX)	1016 mg/kg (.)
Dermal	CLP ATE _(MIX)	195 mg/kg (.)

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Inhalative	CLP ATE _(mix)	1.7 mg/l/4h (aerosol (dust, mist))
LD/LC50 values that are relevant for classification:		
CAS: 7783-34-8 mercury nitrate monohydrate		
Oral	LD50	26 mg/kg (rat) (anhydrous substance; RTECS)
Dermal	LD50	5 mg/kg (ATE)
	LD50.	75 mg/kg (rat) (anhydrous substance; RTECS)
Inhalative	LC50/4h	0.05 mg/l (ATE)
CAS: 7697-37-2 nitric acid		
Oral	LDLo	430 mg/kg (human) (IUCLID)
Inhalative	LC50/4h	0.5 mg/l (aerosol (dust, mist)) (ATE)
		2.65 mg/l (Vapor)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
Risk of corneal clouding.
- **Information on components:** CAS 7697-37-2 / 7783-34-8: chronic: dermatitis
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Information on components:** CAS 7783-34-8: Sensitizing effect by skin contact is possible by prolonged/repeated exposure.
- **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 (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

Information on likely routes of exposure

An intake of nitric acid (during occupational handling) is mainly to be expected via the respiratory tract. Exposure to acid vapors caused irritation to the eyes and skin but damage to the airways is of the greatest concern. [GESTIS]
A primary intake pathway for mercury(II)-nitrate cannot be stated. Intake is possible via the gastrointestinal tract, lung and also through skin penetration. [GESTIS]

Additional toxicological information:

Mercury compounds have a cytotoxic and protoplasmatoxic effect.
The principal signs manifest themselves in the CNS.

CAS: 7783-34-8 mercury nitrate monohydrate	
·	(source: GESTIS) Main toxic effects Acute: probable severe irritation through to chemical burns to mucous membranes and skin, damage to the eyes; skin sensitizing potential, toxic effects to the gastrointestinal system, functional disturbances or damage to the kidneys. Chronic: damage to the skin and kidneys. Repeated or prolonged contact with the skin can cause skin damage (reddening, inflammation, ulcerative changes) which are irritatively or (following sensitization) allergically related.
CAS: 7697-37-2 nitric acid	
·	(source: GESTIS) Main toxic effects Acute: Irritation and corrosion to the eyes, airways and skin, danger of severe damage to the eyes and lungs, after swallowing life threatening chemical burns in the gastrointestinal tract Chronic: Diseases of the airways, damage to the teeth

11.2 Information on other hazards

- **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

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Other information

According to the information available to us, the chemical, physical and toxicological properties of the substances mentioned in Chapter 3 have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity**Aquatic toxicity:****CAS: 7783-34-8 mercury nitrate monohydrate**

LC50	0.17 mg/l/96h (fathead minnow) (anhydrous substance; Ecotox)
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CAS: 7697-37-2 nitric acid

LC50	72 mg/l/96h (mosquitofish) (IUCLID)
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12.2 Persistence and degradability**Other information:**

Mixture of inorganic compounds.

Methods for the determination of biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Pow = n-octanol/wasser partition coefficient

log Pow < 1 = Does not accumulate in organisms.

CAS: 7697-37-2 nitric acid

log Pow	-2.3 (.)
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12.4 Mobility in soil No further relevant information available.**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.**12.7 Other adverse effects**

Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of water supplies.

Forms corrosive mixtures with water even if diluted.

Avoid transfer into the environment.

Water hazard:

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into soil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods**Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to disposers of hazardous waste.

European waste catalogue

16 05 07*	discarded inorganic chemicals consisting of or containing hazardous substances
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06 04 04*	wastes containing mercury
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Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

14.1 UN number or ID number**ADR, IMDG, IATA**

UN3289

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<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	<p>3289 TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (MERCURIC NITRATE, NITRIC ACID), ENVIRONMENTALLY HAZARDOUS TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (MERCURIC NITRATE, NITRIC ACID), MARINE POLLUTANT</p> <p>TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S. (MERCURIC NITRATE, NITRIC ACID)</p>
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <ul style="list-style-type: none"> · Class · Label 	<p>6.1 (TC3) Toxic substances.</p> <p>6.1+8</p>
<ul style="list-style-type: none"> · IMDG <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <ul style="list-style-type: none"> · Class · Label 	<p>6.1 Toxic substances.</p> <p>6.1/8</p>
<ul style="list-style-type: none"> · IATA <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <ul style="list-style-type: none"> · Class · Label 	<p>6.1 Toxic substances.</p> <p>6.1 (8)</p>
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	<p>II</p>
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): 	<p>Product contains environmentally hazardous substances: mercury nitrate monohydrate</p> <p>Symbol (fish and tree)</p> <p>Symbol (fish and tree)</p>
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Kemler Number: · EMS Number: · Segregation groups · Stowage Category · Stowage Code 	<p>Warning: Toxic substances.</p> <p>68</p> <p>F-A,S-B</p> <p>(SGG7) Heavy metals and their salts (including their organometallic compounds), (SGG1) acids</p> <p>B</p> <p>SW2 Clear of living quarters.</p>
<ul style="list-style-type: none"> · 14.7 Maritime transport in bulk according to IMO instruments 	<p>Not applicable.</p>
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code 	<p>100 ml</p> <p>Code: E4</p> <p>Maximum net quantity per inner packaging: 1 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p> <p>2</p> <p>D/E</p>

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· IMDG	
· Limited quantities (LQ)	100 ml
· Excepted quantities (EQ)	Code: E4
	Maximum net quantity per inner packaging: 1 ml
	Maximum net quantity per outer packaging: 500 ml

* SECTION 15: Regulatory information

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

· Poisons Act UK

· Regulated explosives precursors

The substance falls under regulated explosive precursors due to the fact that the concentration is greater than/equal ($\geq x\%$) the stated mass percentage:

CAS: 7697-37-2	nitric acid	3%
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· Regulated poisons

CAS: 7783-34-8	mercury nitrate monohydrate	Listed
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· Reportable explosives precursors

None of the ingredients is listed.

· Reportable poisons

None of the ingredients is listed.

· Regulation (EU) 2019/1148 on the marketing and use of explosives precursors

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see <https://ec.europa.eu>

· explosives precursors - ANNEX I

CAS: 7697-37-2	nitric acid	*
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· Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)

CAS: 7783-34-8	mercury nitrate monohydrate	Annex I Part 1 Annex I Part 3 Annex V Part 2
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· Regulation (EC) No 1334/2000 setting up a Community regime for the control of exports of dual-use items and technology:

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:

None of the ingredients is listed.

· REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)

None of the ingredients is listed.

· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

None of the ingredients is listed.

· Substances of very high concern (SVHC) according to REACH, Article 57

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

· Substances of very high concern (SVHC) according to UK REACH

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

· Directive 2012/18/EU (SEVESO III):

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Seveso category

H2 ACUTE TOXIC

E2 Hazardous to the Aquatic Environment

· Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t

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- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 18
- **Information about limitation of use:**
Employment restrictions concerning young persons must be observed (94/33/EC).
Employment restrictions concerning pregnant and lactating women must be observed (92/85/EEC).
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Training hints** Provide adequate information, instruction and training for operators.
- **Relevant phrases**
 - H272 May intensify fire; oxidiser.
 - H290 May be corrosive to metals.
 - H300 Fatal if swallowed.
 - H310 Fatal in contact with skin.
 - H314 Causes severe skin burns and eye damage.
 - H330 Fatal if inhaled.
 - H331 Toxic if inhaled.
 - 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.
 - EUH071 Corrosive to the respiratory tract.
- **Abbreviations and acronyms:**
 - OECD: Organisation for Economic Co-operation and Development
 - STOT: specific target organ toxicity
 - SE: single exposure
 - RE: repeated exposure
 - EC50: half maximal effective concentration
 - IC50: half maximal inhibitory concentration
 - NOEL or NOEC: No Observed Effect Level or Concentration
 - ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - 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
 - SVHC: Substances of Very High Concern
 - vPvB: very Persistent and very Bioaccumulative
 - Ox. Liq. 3: Oxidizing liquids – Category 3
 - Met. Corr. 1: Corrosive to metals – Category 1
 - Acute Tox. 2: Acute toxicity – Category 2
 - Acute Tox. 4: Acute toxicity – Category 4
 - Acute Tox. 1: Acute toxicity – Category 1
 - Acute Tox. 3: Acute toxicity – Category 3
 - Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2
 - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 - 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
- **Sources**
 - Data arise from safety data sheets, reference works and literature.
 - ECOTOX Database
 - IUCLID (International Uniform Chemical Information Database)
 - RTECS (Registry of Toxic Effects of Chemical Substances)
 - GESTIS- Stoffdatenbank (Substance Database, Germany)
- *** Data compared to the previous version altered.**