Tintometer[®] Group Water Testing



Page 1/11

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

Printing date 27.10.2023

Version number 6 (replaces version 5)

Revision: 27.10.2023

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

- 1.1 Product identifier
- Product name: H₂O₂ Reagent
- · Catalog number: 424991, 2888102
- 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

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

- · 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



GHS05 corrosion

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



STOT SE 3 H335 May cause respiratory 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



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

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

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

Printing date 27.10.2023

(Contd. of p	age 1)
Signal word Danger	
Hazard-determining components of labelling:	
Titanium oxide sulphate	
hydrochloric acid	
sulphuric acid	
Hazard statements	
H290 May be corrosive to metals.	
H314 Causes severe skin burns and eye damage.	
H335 May cause respiratory irritation.	
Precautionary statements	
P260 Do not breathe spray.	
P280 Wear protective gloves / eye protection.	
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 doctor.	
2.3 Other hazards Acid burns have to treated immediately, as it may otherwise cause badly curing wounds.	

· 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: Mixture of inorganic compounds.

· Dangerous components

sulphuric acid	<25%
Met. Corr.1, H290; Skin Corr. 1A, H314	
Specific concentration limits: Skin Corr. 1A; H314: C ≥ 15 %	
Eye Irrit. 2; H319: 5 % ≤ C < 15 %	
Titanium oxide sulphate	<20%
😔 Skin Corr. 1A, H314; Eye Dam. 1, H318	
CAS: 7647-01-0 hydrochloric acid	
Met. Corr.1, H290; Skin Corr. 1B, H314; () STOT SE 3, H335	
Śpecific concentration limits: Skin Corr. 1B; H314: C ≥ 25 %	
Reg.nr.: 01-2119484862-27-XXXX Skin Irrit. 2; H315: 10 % ≤ C < 25 %	
Eye Irrit. 2; H319: 10 % ≤ C < 25 %	
STOT SE 3; C ≥ 10 %	
	 Met. Corr. 1, H290; Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 15 % Skin Irrit. 2; H315: 5 % ≤ C < 15 % Eye Dam. 1; H318: C ≥ 15 % Eye Irrit. 2; H319: 5 % ≤ C < 15 % Titanium oxide sulphate Skin Corr. 1A, H314; Eye Dam. 1, H318 hydrochloric acid Met. Corr.1, H290; Skin Corr. 1B, H314; I STOT SE 3, H335 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H319: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %

• 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 Instantly remove any clothing soiled by the product.

- · After inhalation
- Supply fresh air.
- Call a doctor immediately.
- After skin contact
- Instantly rinse with water.
- Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.
- · 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.
- Do not induce vomiting; instantly call for medical help.
- 4.2 Most important symptoms and effects, both acute and delayed:
- strong caustic effect.

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

Printing date 27.10.2023

pain

Danger

- Danger of gastric perforation.
- Danger of pulmonary oedema.
- 4.3 Indication of any immediate medical attention and special treatment needed:
- If swallowed or in case of vomiting, danger of entering the lungs
- Subsequent observation for pneumonia and pulmonary oedema

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:
- Hydrogen chloride (HCI)

Sulphur oxides (SOx) smoke of metal oxide

- 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.
- Suppress (knock down) gases/vapours/mists wit a water spray jet.
- Ambient fire may liberate hazardous vapours.

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.

6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Use neutralising agent.

Neutralize with diluted sodium hydroxide solution or by throwing on lime sand, lime or sodium carbonate.

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:
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- · Hygiene measures:

Do not inhale gases / fumes / aerosols.

Do not get in eyes, on skin, or on clothing.

Take off immediately all contaminated clothing.

Wash hands during breaks and at the end of the work.

Do not eat, drink or smoke when using this product.

(Contd. of page 2)

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

- · 7.2 Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and containers: Store in cool location.
- Information about storage in one common storage facility:
- Store away from metals. Do not store together with alkalis (caustic solutions).
- Store away from flammable substances.
- Further information about storage conditions:
- 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

-	mit values that require monitoring at the workplace:			
CAS: 7664-93-9 sulp	CAS: 7664-93-9 sulphuric acid			
WEL (Great Britain)	Long-term value: 0.05* mg/m³ *mist: defined as thoracic fraction			
IOELV (European Ur	ion) Long-term value: 0.05 mg/m³			
CAS: 7647-01-0 hyd	rochloric acid			
WEL (Great Britain)	Short-term value: 8 mg/m³, 5 ppm Long-term value: 2 mg/m³, 1 ppm (gas and aerosol mists)			
IOELV (European Ur	nion) Short-term value: 15 mg/m³, 10 ppm Long-term value: 8 mg/m³, 5 ppm			
WEL (Great Britain): EH40/2020 IOELV (European Union): (EU) 2019/1831 • Additional information: IOELV = Indicative Occupational Exposure Limit • DNELs Derived No Effect Level (DNEL)				
CAS: 7664-93-9 sulphuric acid				
Inhalative DNEL 0.1	mg/m³ (Worker / acute / local effects)			
0.0	95 mg/m³ (Worker / acute / systemic effects)			
CAS: 7647-01-0 hydrochloric acid				
Inhalative DNEL 15	mg/m ³ (Worker / acute / local effects)			
8 r	ng/m³ (Worker / long-term / local effects)			
• 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.				

Predicted No Effect Concentration (PNEC)

CAS: 7	'664-93-9 sulphuric acid		
PNEC	8.8 mg/l (Sewage treatment plant)		
	0.00025 mg/l (Marine water)		
	0.0025 mg/l (Fresh water)		
PNEC	0.002 mg/kg (Marine sediment)		
	0.002 mg/kg (Fresh water sediment)		
CAS: 7	CAS: 7647-01-0 hydrochloric acid		
PNEC	0.036 mg/l (Sewage treatment plant)		
	0.036 mg/l (Marine water)		
	0.045 mg/l (Aquatic intermittent release)		
	(Contd. on page 5)		

Printing date 27.10.2023

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

Printing date 27.10.2023

	(Contd. of page 4)
0.036 mg/l (Fresh water)	
· 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 prote See item 7.	ective equipment.
• Individual protection measures, such as personal protective equipment Protective clothing should be selected specifically for the workplace, depending on concentration and quantity substances handled.	of the hazardous
• 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
- Acid resistant 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): Acid resistant protective clothing
- · Breathing equipment: Use breathing protection against the effects of fumes/dust/aerosol.
- Recommended filter device for short term use: Combination filter E-P2

· 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:	Characteristic	
· Odour threshold:	Not determined.	
 Melting point/Freezing point: 	Not determined.	
Boiling point or initial boiling point and boiling ran	ge Not determined.	
• Flammability	The product is not combustible.	
Explosive properties:	Product is not explosive.	
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:	~1.44 g/cm³	
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		

GВ

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

	(Contd. of page 5
· Corrosive to metals	May be corrosive to metals.
\cdot 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:	CAS 7664-93-9 :
	Oxidising potential
· Additional information	
· Solids content:	< 20 %
· Solvent content:	
· Organic solvents:	0 %
· Water:	> 40 %

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
- Reacts with metals forming hydrogen (Danger of explosion in case of large amounts!)
- Corrosive action on metals
- Diluting or dissolving in water always causes rapid heating
- When diluting, always add acid to water, never vice versa
- Reacts with acids, alkalis and oxidizing agents
- Reacts with reducing agents
- Reacts with peroxides
- · 10.4 Conditions to avoid Strong heating (decomposition)
- **10.5 Incompatible materials:** metals light metals alkali metals combustible substances organic solvents
- 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 Based on available data, the classification criteria are not met.

Oral	LD50	2140 mg/kg (rat) (IUCLID)
Inhalative	LC 50	510 mg/m³/2h (rat) IUCLID
CAS: 7647-01-0 hydrochloric acid		
Inhalative	LC50	3124 ppm / 1h (rat) (RTECS,V, pure)

Risk of blindness!

Information on components:

CAS: 7647-01-0 hydrochlo	ric acid
Irritation of skin OECD 404	(rabbit: burns)
Irritation of eyes OECD 405	(rabbit: burns)

• Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

· Information on components:

CAS: 7647-01-0 hydrochloric acid

Sensitisation OECD 406 (negative) (EPA OPP 81-6: Guinea pig maximisation test)

• 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 May cause respiratory irritation.

STOT (specific target organ toxicity) -repeated exposure Based on available data, the classification criteria are not met.

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

· Information on likely routes of exposure

Exposure to hydrochloric acid is possible during occupational handling due to contact with the skin and inhalation of vapors. The main intake pathway is considered to be via the respiratory tract.

Gastrointestinal tract: Specific kinetic studies are not available. They are considered not necessary because gastric juice already contains a high concentration of hydrochloric acid which is physiologically conditioned. Following ingestion, local effects are therefore of priority. [GESTIS]

The intake of sulfuric acid is mainly to be expected via the inhalative pathway in the form of aerosols. No studies on absorbability are available.

Generally, local reactions cause the main effects.

Following impact to the skin strong local effects are the main issue. There is no indication of absorption of relevant amounts of S. via the intact skin.

Absorbability via the gastrointestinal tract is assumed. However, no studies on the kinetics of uptake are available. [GESTIS]

· Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach. The aerosol is corrosive to the eyes, the skin and the respiratory tract. Inhalation of aerosols may cause lung oedema.

CAS: 7664-93-9 sulphuric acid

(source: GESTIS)

Main toxic effects

Acute: Irritation up to chemical burns to the mucous membranes and skin, danger of serious damage to the eyes and lungs Chronic: Irritation to the eyes and airways, erosion of the teeth, damage to the skin

Further Information:

Concentrated S. differs considerably from dilute Sulfuric acid with regard to chemical properties and effects. With increased dilution Sulfuric acid acts less aggressively.

CAS: 7647-01-0 hydrochloric 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, following ingestion, concentration-dependent damage to the gastrointestinal tract Chronic: Airway diseases, damage to the teeth, gastrointestinal disorders

Further Information:

The acute action of hydrochloric acid is based on the locally damaging effects on contacted tissues which are primarily dependent on the concentration. Following repeated contact with the skin, even diluted hydrochloric acid can cause skin damage (reddening, drying, fissures, dermatitis). The critical effect following repeated inhalative exposure is irritation to the respiratory tract.

· 11.2 Information on other hazards

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

· 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.

GB

(Contd. of page 6)

Printing date 27.10.2023

Version number 6 (replaces version 5)

Revision: 27.10.2023

(Contd. of page 7)

Product name: H₂O₂ Reagent

Printing date 27.10.2023

 · 12.1 Toxicity

 · Aquatic toxicity:

 CAS: 7664-93-9 sulphuric acid

 EC50
 >100 mg/l/48h (Daphnia magna) (OECD 202) (ECHA)

 LC50
 16–29 mg/l/96h (bluegill) (Merck)

 CAS: 7647-01-0 hydrochloric acid

 EC50
 20.5 mg/l/96h (bluegill) (OECD 203)

EC50 20.5 mg/l/96h (bluegill) (OECD 203 (Merck)

SECTION 12: Ecological information

- Bacterial toxicity: sulphates toxic > 2.5 g/l
- Other information:
- Toxic for fish:
- Sulphates > 7 g/l
- HCl > 25 mg/l
- · 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 No further relevant information available.
- **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

Harmful effect due to pH shift.

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

· 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	UN3264
 14.2 UN proper shipping name ADR IMDG, IATA 	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID, SULPHURIC ACID) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID, SULPHURIC ACID)
	(Contd. on page 9)

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

Printing date 27.10.2023

		(Contd. of page 8
 14.3 Transport hazard class(es) 		
· ADR		
· Class	8 (C1) Corrosive substances.	
· Label	8	
· IMDG, IATA		
a a construction of the second s		
Class	8 Corrosive substances.	
· Label	8	
· 14.4 Packing group · ADR, IMDG, IATA	II	
14.5 Environmental hazards:	Not applicable.	
 14.6 Special precautions for user Kemler Number: EMS Number: Segregation groups Stowage Category Stowage Code 	Warning: Corrosive substances. 80 F-A,S-B (SGG1) Acids B SW2 Clear of living quarters.	
14.7 Maritime transport in bulk according to IMC instruments	D Not applicable.	
· Transport/Additional information:		
 ADR Limited quantities (LQ) Excepted quantities (EQ) 	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml	
 Transport category Tunnel restriction code 	2 E	
 IMDG Limited quantities (LQ) Excepted quantities (EQ) 	1L Code: E2 Maximum net quantity per inner packaging: 30 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 ($c \ge x\%$) the stated mass percentage:

CAS: 7664-93-9 sulphuric		15%	
CAS: 7647-01-0 hydrochlo	ic acid	10%	
Regulated poisons	· Regulated poisons		
None of the ingredients is li	sted.		
· Reportable explosives precursors			
None of the ingredients is listed.			
		(Contd. on page 10)	

GB —

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

Printing date 27.10.2023

Deve stable sectores	(Contd. of page
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 Regu All suspicious transactions, and significant disappearances and thefts should be reported to the relev Please see https://ec.europa.eu	
explosives precursors - ANNEX I	
CAS: 7664-93-9 sulphuric acid	
Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)	
None of the ingredients is listed.	
Regulation (EC) No 1334/2000 setting up a Community regime for the control of exports of du technology:	al-use items and
None of the ingredients is listed.	
Regulation (EC) No 273/2004 on drug precursors	
CAS: 7664-93-9 sulphuric acid	:
CAS: 7664-93-9 sulphuric acid CAS: 7647-01-0 hydrochloric acid	
	:
CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Common drug precursors CAS: 7664-93-9 sulphuric acid	
CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Comm in drug precursors	nunity and third countrie
CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Common drug precursors CAS: 7664-93-9 sulphuric acid	nunity and third countrie
CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Commin drug precursors CAS: 7664-93-9 sulphuric acid CAS: 7647-01-0 hydrochloric acid	nunity and third countrie
CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Commin drug precursors CAS: 7664-93-9 sulphuric acid CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: None of the ingredients is listed.	nunity and third countrie
CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Common findrug precursors CAS: 7664-93-9 sulphuric acid CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:	nunity and third countrie
CAS: 7647-01-0 hydrochloric acid Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Commin drug precursors CAS: 7664-93-9 sulphuric acid CAS: 7647-01-0 hydrochloric acid 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)	nunity and third countrie

· Directive 2012/18/EU (SEVESO III):

· Named dangerous substances - ANNEX I hydrochloric acid

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· Information about limitation of use: Employment restrictions concerning young persons must be observed (94/33/EC).

· 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

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

· 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)

Version number 6 (replaces version 5)

Revision: 27.10.2023

Product name: H₂O₂ Reagent

(Contd. of page 10) 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)

- DNEL: Derived No-Effect Level (UK REACH) PNEC: Predicted No-Effect Concentration (UK REACH) 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

- Met. Corr. 1: Corrosive to metals Category 1 Skin Corr. 1A: Skin corrosion/irritation Category 1A Skin Corr. 1B: Skin corrosion/irritation Category 1B Eye Dam. 1: Serious eye damage/eye irritation Category 1
- STOT SE 3: Specific target organ toxicity (single exposure) Category 3
- · Sources

Data arise from safety data sheets, reference works and literature. IUCLID (International Uniform Chemical Information Database) RTECS (Registry of Toxic Effects of Chemical Substances)

* * Data compared to the previous version altered.

Printing date 27.10.2023

GB