



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and  
Regulation (EC) No. 1272/2008

Supersedes date 17-Aug-2023

Revision date 23-Mar-2026

Revision Number 2

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

### 1.1. Product identifier

**Product Code(s)** LPS100B  
**Product Name** ENZYME SOLUTION  
**Synonyms** None  
**Pure substance/mixture** Mixture

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

**Recommended use** Laboratory chemicals  
For professional use only  
**Uses advised against** None known

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

<b>Manufacturer</b>	<b>Supplier</b>
CytoCell Ltd., Oxford Gene Technology 418 Cambridge Science Park, Milton Road, Cambridge CB4 0PZ, United Kingdom T: +44 (0)1223 294048 F: +44 (0)1223 294986 probes@cytoCell.com http://www.ogt.com	System Europe SE Deelböge 19D 22297 Hamburg Germany T: +49 (40) 527 26 0

### For further information, please contact

**E-mail address** probes@cytoCell.com

### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1223 294048 (Monday - Friday, 9am - 5pm)

**Emergency telephone - §45 - (EC)1272/2008**

**Europe** 112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

<b>Skin irritation</b>	Category 2 - (H315)
<b>Eye irritation</b>	Category 2 - (H319)
<b>Respiratory sensitisation</b>	Category 1 - (H334)

**2.2. Label elements**

Contains Pepsin A



**Signal word**  
Danger

**Hazard statements**

H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary Statements - EU (§28, 1272/2008)**

P261 - Avoid breathing dust, fume, gas, mist, vapors and spray.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear protective gloves, protective clothing, eye protection and face protection.  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P321 - Specific treatment (see supplemental first aid instructions on this label).  
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

**Additional information**

This product requires tactile warnings if supplied to the general public.

**2.3. Other hazards**

**Other hazards** The product does not contain any substance(s) classified as PBT or vPvB.

**PBT or vPvB properties** The mixture does not contain any substances meeting the PBT or vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

Not applicable

**3.2. Mixtures**

Chemical name	Weight-%	REACH registration number	EC No. (Index No.)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Pepsin A 9001-75-6	0.1 - 1	No data available	232-629-3 (647-008-00-6)	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) STOT SE 3 (H335)	-	-	-	-
Hydrochloric acid 7647-01-0	<0.01	No data available	231-595-7 (017-002-00-2)	Press. Gas Skin Corr. 1A (H314)	Eye Irrit. 2 :: 10%<=C<25	-	-	U,5

				Acute Tox. 3 (H331)	% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 10%<=C<25 % STOT SE 3 :: C>=10%			
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CLP Notes

Note U - When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned: Press. Gas (Comp.), Press. Gas (Liq.), Press. Gas (Ref. Liq.), Press. Gas (Diss.). Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

Note 5 - The concentration limits for gaseous mixtures are expressed as volume per volume percentage.

**Full text of H- and EUH-phrases: see section 16**

**Acute Toxicity Estimate**

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Hydrochloric acid 7647-01-0	277	5015.01	No data available	No data available	563.3022

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59).

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.
<b>Ingestion</b>	May produce an allergic reaction. Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information.

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

**Symptoms** May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Erythema (skin redness). May cause redness and tearing of the eyes. Burning sensation.

**Effects of Exposure** None known.

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

**Note to doctors** May cause sensitisation in susceptible persons. Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable extinguishing media** No information available.

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

**Specific hazards arising from the chemical** Product is or contains a sensitiser. May cause sensitisation by inhalation.

**Hazardous combustion products** Carbon oxides.

#### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

**Environmental precautions** Do not allow to enter into surface water or drains. Inform authorities in the event of product spillage to water courses or sewage systems. Prevent further leakage or spillage if safe to do so.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labelled containers. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Clean contaminated surface thoroughly.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling** Wear personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep away from Incompatible materials. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

**Storage class (TRGS 510)** LGK 10.

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

**Specific use(s)** The identified uses for this product are detailed in Section 1.2.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Exposure Limits**

Chemical name	European Union			
Hydrochloric acid 7647-01-0	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;			
Chemical name	Austria	Belgium	Bulgaria	Croatia
Hydrochloric acid 7647-01-0	TWA-TMW: 5 ppm; TWA-TMW: 8 mg/m <sup>3</sup> ; STEL-KZGW: 10 ppm (8 X 5 min); STEL-KZGW: 15 mg/m <sup>3</sup> (8 X 5 min);	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	TWA: 5 ppm; TWA: 8.0 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15.0 mg/m <sup>3</sup> ;	TWA-GVI: 5 ppm; TWA-GVI: 8 mg/m <sup>3</sup> ; STEL-KGVI: 10 ppm; STEL-KGVI: 15 mg/m <sup>3</sup> ;
Chemical name	Cyprus	Czech Republic	Denmark	Estonia
Hydrochloric acid 7647-01-0	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	TWA: 8 mg/m <sup>3</sup> ; Ceiling: 15 mg/m <sup>3</sup> ;	STEL: 5 ppm; STEL: 8 mg/m <sup>3</sup> ;	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
Chemical name	Finland	France	Germany TRGS	Germany (DFG)
Pepsin A 9001-75-6	-	-	-	RS
Hydrochloric acid 7647-01-0	STEL: 5 ppm; STEL: 7.6 mg/m <sup>3</sup> ;	STEL-VLCT (restrictif): 5 ppm;	TWA-AGW; 2 ppm (2(l));	TWA-MAK: 2 ppm; l(2); TWA-MAK: 3.0 mg/m <sup>3</sup> ; l

		STEL-VLCT (restrictif): 7.6 mg/m <sup>3</sup> ;	TWA-AGW; 3 mg/m <sup>3</sup> (2(l));	(2);
<b>Chemical name</b>	<b>Greece</b>	<b>Hungary</b>	<b>Italy MDLPS</b>	<b>Italy (AIDII)</b>
Hydrochloric acid 7647-01-0	TWA: 5 ppm; TWA: 7 mg/m <sup>3</sup> ; STEL: 5 ppm; STEL: 7 mg/m <sup>3</sup> ;	TWA-AK: 8 mg/m <sup>3</sup> ; TWA-AK: 5 ppm; STEL-CK: 165 mg/m <sup>3</sup> ; STEL-CK: 10 ppm;	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	Ceiling: 2 ppm; Ceiling: 2.9 mg/m <sup>3</sup> ;
<b>Chemical name</b>	<b>Ireland</b>	<b>Latvia</b>	<b>Lithuania</b>	<b>Luxembourg</b>
Hydrochloric acid 7647-01-0	TWA: 8 mg/m <sup>3</sup> ; TWA: 5 ppm; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	TWA-IPRD: 5 ppm; TWA-IPRD: 8 mg/m <sup>3</sup> ; STEL-TPRD: 10 ppm; STEL-TPRD: 15 mg/m <sup>3</sup> ;	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
<b>Chemical name</b>	<b>Malta</b>	<b>Netherlands</b>	<b>Norway</b>	<b>Poland</b>
Hydrochloric acid 7647-01-0	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	Ceiling: 5 ppm; Ceiling: 7 mg/m <sup>3</sup> ;	TWA-NDS: 5 mg/m <sup>3</sup> ; STEL-NDSch: 10 mg/m <sup>3</sup> ;
<b>Chemical name</b>	<b>Portugal</b>	<b>Romania</b>	<b>Slovakia</b>	<b>Slovenia</b>
Hydrochloric acid 7647-01-0	TWA (VLE-MP): 5 ppm; TWA (VLE-MP): 8 mg/m <sup>3</sup> ; STEL (VLE-CD): 10 ppm; STEL (VLE-CD): 15 mg/m <sup>3</sup> ; Ceiling (VLE-CM): 2 ppm;	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;	TWA: 5 ppm; TWA: 8.0 mg/m <sup>3</sup> ; Ceiling: 15 mg/m <sup>3</sup> ;	TWA: 5 ppm; TWA: 8 mg/m <sup>3</sup> ; STEL: 10 ppm; STEL: 15 mg/m <sup>3</sup> ;
<b>Chemical name</b>	<b>Spain</b>	<b>Sweden</b>	<b>Switzerland</b>	<b>United Kingdom</b>
Hydrochloric acid 7647-01-0	TWA-(VLA-ED): 5 ppm; TWA-(VLA-ED): 7.6 mg/m <sup>3</sup> ; STEL (VLA-EC): 10 ppm; STEL (VLA-EC): 15 mg/m <sup>3</sup> ;	TLV-NGV: 2 ppm; TLV-NGV: 3 mg/m <sup>3</sup> ; STEL (Bindande KGV): 4 ppm; STEL (Bindande KGV): 6 mg/m <sup>3</sup> ;	TWA-MAK: 2 ppm; TWA-MAK: 3 mg/m <sup>3</sup> ; STEL-KZGW: 4 ppm; STEL-KZGW: 6 mg/m <sup>3</sup> ;	TWA: 1 ppm; gas and aerosol mist TWA: 2 mg/m <sup>3</sup> ; gas and aerosol mist STEL: 5 ppm; gas and aerosol mist STEL: 8 mg/m <sup>3</sup> ; gas and aerosol mist

**Note** See section 16 for terms and abbreviations

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL) - Workers**

Chemical name	Oral	Dermal	Inhalation
Hydrochloric acid 7647-01-0	-	-	8 mg/m <sup>3</sup> [5] [6] 15 mg/m <sup>3</sup> [5] [7]

**Notes**

- [5] Local health effects.
- [6] Long term.
- [7] Short term.

**Derived No Effect Level (DNEL) - General Public**

Chemical name	Oral	Dermal	Inhalation
Hydrochloric acid 7647-01-0	-	-	8 mg/m <sup>3</sup> [5] [6] 15 mg/m <sup>3</sup> [5] [7]

**Notes**

- [5] Local health effects.
- [6] Long term.
- [7] Short term.

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Personal protective equipment**

**Eye/face protection** Eye protection must conform to standard EN 166. Handling of larger amounts: Wear protective eye glasses for protection against liquid splashes. Wear safety glasses with side shields (or goggles).

**Hand protection** Gloves must conform to standard EN 374. To protect the wearer, gloves must be the correct fit and be used properly. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. (EN ISO 6529).

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment. Use appropriate respiratory protection. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

**Environmental exposure controls** No information available.

**SECTION 9: Physical and chemical properties**

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

**Appearance**  
**Physical state** Liquid  
**Colour** Colourless  
**Odour** Odourless  
**Odour threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No data available
Boiling point or initial boiling point and boiling range		No data available
Flammability		Not flammable
Lower and upper explosion limit/flammability limit		
Lower explosion limit		Not applicable
Upper explosion limit		Not applicable
Flash point		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH	0 - 2	No data available
pH (as aqueous solution)		No data available

Kinematic viscosity	No data available
Dynamic viscosity	No data available
Water solubility	
Solubility	No data available
Partition coefficient n-octanol/water (log value)	No data available
Vapour pressure	No data available
Density and/or relative density	No data available
Bulk density	No data available
Liquid Density	No data available
Relative vapour density	No data available
Particle characteristics	
Particle Size	No data available
Particle Size Distribution	No data available

**9.2. Other information**

Molecular weight	No information available
VOC content	No information available
Softening point	No information available

**9.2.1. Information with regards to physical hazard classes**

Explosives	
Explosive properties	No information available
Oxidising properties	No information available

**9.2.2. Other safety characteristics**

No information available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Reactivity None under normal use conditions.

**10.2. Chemical stability**

Stability Stable under normal conditions.

**Explosion data**

Sensitivity to mechanical impact None.  
Sensitivity to static discharge None.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions None under normal processing.

**10.4. Conditions to avoid**

Conditions to avoid Protect from direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

**10.6. Hazardous decomposition products**

Hazardous decomposition products Carbon oxides.

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Information on likely routes of exposure**

**Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause sensitisation in susceptible persons. (based on components). May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. May cause additional effects as listed under "Inhalation". Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Erythema (skin redness). May cause redness and tearing of the eyes. Burning sensation.

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

**Numerical measures of toxicity**

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid	238 - 277 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 1.68 mg/L ( Rat ) 1 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitisation</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

**11.2. Information on other hazards**

**11.2.1. Endocrine disrupting properties**

**Endocrine disruption for human health** Based on available data, the classification criteria are not met.

**11.2.2. Other information**

**Other adverse effects** No information available.

**SECTION 12: Ecological information**

**12.1. Toxicity** The environmental impact of this product has not been fully investigated.

**12.2. Persistence and degradability** No information available.

**12.3. Bioaccumulative potential** No information available.

**12.4. Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment** This product does not contain any substances that are assessed to be a PBT or a vPvB.

Chemical name	PBT and vPvB assessment
Hydrochloric acid	Not PBT/vPvB

**12.6. Endocrine disrupting properties** Based on available data, the classification criteria are not met.

**12.7. Other adverse effects** No information available.

**PMT or vPvM properties** Based on available data, the classification criteria are not met.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**Waste codes / waste designations according to EWC / AVV** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: Transport information**

**IATA** Not regulated  
 14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name Not regulated  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
     Special Provisions None

**IMDG** Not regulated  
 14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name Not regulated  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
     Special Provisions None  
 14.7 Maritime transport in bulk according to IMO instruments No information available

**RID** Not regulated  
 14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name Not regulated  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
     Special Provisions None

**ADR** Not regulated  
 14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name Not regulated  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
     Special Provisions None

**ADN**  
 14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name Not regulated  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not applicable  
 14.5 Environmental hazard Not applicable  
 14.6 Special precautions for user  
     Special Provisions None

**SECTION 15: Regulatory information**

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

**National regulations**

**France**

**Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number
Hydrochloric acid 7647-01-0	RG 66

**Germany**

**Water hazard class (WGK)** non-hazardous to water (nwg)

**Chemical Prohibition Ordinance (ChemVerbotsV)**

Not applicable.

**TRGS 905**

Not applicable

**Switzerland**

**Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018** Not applicable

**Storage of Hazardous Material** SC 10/12

**WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20** Class B

**Major Accidents Ordinance SR 814.012** Not applicable

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**

Use restricted. See item: 3.

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Pepsin A 9001-75-6	75	-
Hydrochloric acid 7647-01-0	75	-

**Persistent Organic Pollutants**

Not applicable

**Named dangerous substances per Seveso Directive (2012/18/EU)**

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Hydrochloric acid 7647-01-0	25	250

**Ozone-depleting substances (ODS) regulation (EC) 2024/590**

Not applicable.

**Biocidal Products Regulation (EU) No 528/2012 (BPR)**

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Hydrochloric acid 7647-01-0	2: Disinfectants and algaecides not intended for direct application to humans or animals

**Explosives Precursors Marketing and Use (2019/1148)**

Not applicable.

**International Inventories**

Contact supplier for inventory compliance status

**15.2. Chemical safety assessment**

Chemical Safety Report No information available.

**SECTION 16: Other information**

**Full text of any hazard and/or precautionary statements referred to under Sections 2-15**

- H314 - Causes severe skin burns and eye damage
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H331 - Toxic if inhaled
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 - May cause respiratory irritation
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P280 - Wear protective gloves
- P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
- P321 - Specific treatment (see supplemental first aid instructions on this label)
- P332 + P313 - If skin irritation occurs: Get medical advice/attention
- P362 + P364 - Take off contaminated clothing and wash it before reuse
- P280 - Wear protective gloves, protective clothing, eye protection and face 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
- P337 + P313 - If eye irritation persists: Get medical advice/attention
- P261 - Avoid breathing dust, fume, gas, mist, vapors and spray
- P284 - In case of inadequate ventilation wear respiratory protection
- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor
- P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

**Key or legend to abbreviations and acronyms used in the safety data sheet**

List may include phrases which are not applicable to this product

ACGIH	American Conference of Governmental Industrial Hygienists
AIDII	Italian Association of Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DFG	German Research Foundation
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
ECHA	European Chemicals Agency
EC Number	European Community number
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
EWC	European Waste Codes
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer

IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organisation
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organisation for Standardisation
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MAK	Maximum Concentration at the Workplace
MAL	Measuring Technical Hygienic Air Needs
MARPOL	International Convention for the Prevention of Pollution from Ships
MDLPS	Ministry of Labour and Social Policy
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
SVHC	Substance of very high concern
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TRGS	Technical Rule for Hazardous Substances
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
C	Carcinogen
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitiser
RS	Respiratory Sensitiser
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma

Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Chronic aquatic toxicity	Calculation method
Acute aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

**Key literature references and sources for data used to compile the SDS**

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 U.S. Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications  
 International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program  
 International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set  
 United Nations World Health Organization (WHO)

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**Disclaimer**

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**End of Safety Data Sheet**