



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: SafeWork Australia Approved Code of Practice about the preparation of safety data sheets for hazardous chemicals (July 2020), which is an approved code of practice under section 274 of the Work Health and Safety Act

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Revision Number 3

## Section 1: Identification

### Product identifier

Product Name ENZYME SOLUTION

Product Code(s) LPS100B

### Other means of identification

Pure substance/mixture Mixture

### Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals  
For professional use only

Uses advised against None known

### Details of manufacturer or importer

#### Importer

System Australia Pty Ltd  
Suite 3, Level 5  
15 Talavera Rd  
Macquarie Park  
NSW 2113  
Telephone no. +61 2 9016 3040

#### Manufacturer

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>

For further information, please contact

### Emergency telephone number

Emergency telephone number For medical advice (English): 13 11 26 (NSW Poisons Information Centre)

## Section 2: Hazard(s) identification

### Classification of the substance or mixture

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS)

### Respiratory sensitisation

Category 1

### Label elements

Health hazard



**Signal word**  
DANGER

**Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapours/spray

In case of inadequate ventilation wear respiratory protection

**Precautionary Statements - Response**

IF INHALED: Remove person to fresh air and keep comfortable for breathing

If experiencing respiratory symptoms: Call a POISONS INFORMATION CENTRE or doctor

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards which do not result in classification**

The product does not contain any substance(s) classified as PBT or vPvB. Causes mild skin irritation.

### Section 3: Composition/information on ingredients

Chemical name	CAS No.	Weight-%
Pepsin A	9001-75-6	0.1 - 5
Non-hazardous ingredients	Proprietary	Balance

### Section 4: First aid measures

**Description of first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Emergency telephone number</b>	Poisons Information Centre, Australia: 13 11 26
<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 thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor.
<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.

### **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. Prolonged contact may cause redness and irritation.

**Effects of Exposure** No information available.

### **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**

### **Suitable Extinguishing Media**

**Suitable extinguishing equipment** Dry chemical, CO2, water spray or alcohol-resistant foam.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

### **Specific hazards arising from the chemical**

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

**Hazardous combustion products** Carbon oxides.

### **Special protective actions for firefighters**

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

## **Section 6: Accidental release measures**

### **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.

### **Environmental precautions**

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

### **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** Cover liquid spill with sand, earth or other non-combustible absorbent material. Pick up and transfer to properly labelled containers.

### **Precautions to prevent secondary hazards**

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

**Section 7: Handling and storage**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Wear personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before re-use. Avoid breathing vapours or mists. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment.

**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.

**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.

**Incompatible materials** Strong acids, Strong bases, Alcohols.

**Section 8: Exposure controls and personal protection**

**Control parameters**

**Exposure Limits**

Chemical name	European Union	United Kingdom	Germany DFG
Pepsin A 9001-75-6	-	-	respiratory sensitizer

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

**Appropriate engineering controls**

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

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

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

**Skin and body protection** Wear suitable protective clothing.

**Hand protection** 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.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Environmental exposure controls** No information available.

**Thermal hazards** No information available.

**Section 9: Physical and chemical properties**

**Information on basic physical and chemical properties**

**Appearance**

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

**Property**

**Values**

**Remarks • Method**

Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		Not applicable
Lower flammability or explosive limits		Not applicable
Flash point		No data available
Auto-ignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility		
Solubility(ies)		No data available
Partition coefficient		No data available
Vapour pressure		No data available
Relative density		No data available
Bulk density		No data available
Liquid Density		No data available
Relative vapour density		No data available
Particle characteristics		No information available
Particle Size		No data available
Particle Size Distribution		No data available

**Other information**

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

**Information with regard to physical hazard classes**

**Explosives**

Explosive properties	No information available
Not flammable	

**Oxidising properties** No information available

**Section 10: Stability and reactivity**

**Reactivity**

**Reactivity** None under normal use conditions.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

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

**Incompatible materials**

**Incompatible materials** Strong acids, Strong bases, Alcohols.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides.

**Section 11: Toxicological information**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. May cause sensitisation in susceptible persons. (based on components).

**Eye contact** Specific test data for the substance or mixture is not available. May cause slight eye irritation.

**Skin contact** 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 mild skin irritation.

**Ingestion** Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation".

**Symptoms** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, light-headedness, chest pain, muscle pain, or flushing. Coughing and/or wheezing. Prolonged contact may cause redness and irritation.

**Acute toxicity** No information available.

**Numerical measures of toxicity - Product Information**

**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 mild skin irritation.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitisation</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**Section 12: Ecological information**

**Ecotoxicity**

**Aquatic ecotoxicity**                      The environmental impact of this product has not been fully investigated.

**Terrestrial ecotoxicity**                      There is no data for this product.

**Persistence and degradability**

**Persistence and degradability**                      No information available.

**Bioaccumulative potential**

**Bioaccumulation**                      No information available.

**Mobility**

**Mobility**                      No information available.

**Other adverse effects**

**Other adverse effects**                      No information available.

**Section 13: Disposal considerations**

**Disposal 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 re-use empty containers.

*See section 8 for more information*

**Section 14: Transport information**

**ADG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**  
No information available

**Section 15: Regulatory information**

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

**National regulations**

**Australia**

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poison Schedule Number** Not applicable

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Pepsin A - 9001-75-6	Present	-

**Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**International Inventories**

Contact supplier for inventory compliance status

**International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

**Section 16: Other information**

Issuing Date	15-Oct-2021
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Revision Note	Updated format.

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

ACGIH	American Conference of Governmental 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
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	Environmental Protection Agency
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)
MARPOL	International Convention for the Prevention of Pollution from Ships
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	Organisation 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
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
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
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
Sen+	Sensitiser
Sk*	Skin designation
**	Hazard Designation

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

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 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  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 Australian Industrial Chemicals Introduction Scheme (AICIS)  
 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)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

#### Disclaimer

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information**

relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**