# Safety Data Sheet

Revision Date 2023-12-29



Revision Number 10

1. Identification		
Product identifier		
Product Name	Positive Control Placental Alkaline Phosphatase	
Other means of identification		
Product Code	S4652	
Synonyms	No information available	
Recommended use of the chemical and restrictions on use		
Identified uses	For research use only. Not for use in diagnostic procedures	
Restrictions on use	No information available	
Details of the supplier of the safety	data sheet	
<u>Supplier</u> USA: Takara Bio USA, Inc. 2560 Orchard Parkway San Jose, CA 95131, USA Phone: 800.662.2566/888.251.66 Web: www.takarabio.com	18	
Emergency telephone number		
Emergency telephone	In case of emergency, call PERS (Professional Emergency Resource Services) 1-800-633-8253 (US) or 801-629-0667 (international).	

## 2. Hazard(s) identification

#### Product Classification Data

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

#### Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance	Clear, colorless	Physical state Liquid	Odor None

#### Unknown acute toxicity

#### Other information

No information available.

# 3. Composition/information on ingredients

#### Substance

Not applicable.

#### Mixture

Chemical name	CAS No.	Weight-%	Trade secret
Glycerol	56-81-5	50 - 60	*

4. First-aid measures		
Description of first aid measures		
Inhalation	Remove to fresh air.	
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water.	
Ingestion	Rinse mouth.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
Indication of any immediate medica	al attention and special treatment needed	
Note to physicians	Treat symptomatically.	
	5. Fire-fighting measures	
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the	
Large Fire	surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the chemical	No information available.	
Explosion Data		

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and<br/>precautions for fire-fightersFirefighters should wear self-contained breathing apparatus and full firefighting turnout gear.<br/>Use personal protection equipment.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

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 labeled containers.

## 7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** 

Keep container tightly closed in a dry and well-ventilated place.

### 8. Exposure controls/personal protection

#### Control parameters

#### Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Glycerol	-	TWA: 15 mg/m <sup>3</sup> mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m <sup>3</sup> mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m <sup>3</sup> mist,	
		total particulate	
		(vacated) TWA: 5 mg/m <sup>3</sup> mist,	
		respirable fraction	

#### Appropriate engineering controls

**Engineering controls** 

Showers Eyewash stations Ventilation systems.

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

Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

Physical state	Liquid	
Appearance	Clear, colorless	
Color	Colorless	
Odor	None	
Odor Threshold	No information available	
Property	Values	Remarks • Method
рН	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point/boiling range (°C)	No data available	None known
Flash point	No data available	Open cup
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic Viscosity	No data available	None known
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	No information available	
Liquid Density	No information available	
Bulk Density	No information available	
	10. Stability and	reactivity

Reactivity	No information available.	
Chemical stability	Stable under normal conditions.	

Possibility of hazardous reactions	None under normal processing.	
Conditions to Avoid	None known based on information supplied.	
Incompatible materials	None known based on information supplied.	
Hazardous decomposition products None known based on information supplied.		

# 11. Toxicological information

#### Information on likely routes of exposure

motoms related to the physical	chemical and toxicological characteristics
Ingestion	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Inhalation	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	24,777.70 mg/kg
ATEmix (dermal)	20,000.00 mg/kg
ATEmix (inhalation-dust/mist)	5.50 mg/l

#### Unknown acute toxicity

#### Component Information

Chemical name Oral LD50		Dermal LD50	Inhalation LC50	
	Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h
	56-81-5			

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

Skin corrosion/irritation	No information available.		
Serious eye damage/eye irritation	No information available.		
Respiratory or skin sensitization	No information available.		
Germ cell mutagenicity	No information available.		
Carcinogenicity	No information available.		

Reproductive toxicity	No information available.			
STOT - single exposure	No information available.			
STOT - repeated exposure	No information available.			
Aspiration hazard	No information available.			
Other adverse effects	No information available.			
Interactive effects	No information available.			

# 12. Ecological information

#### Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Glycerol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-

Persistence and degradability

No information available.

**Bioaccumulation** 

There is no data for this product.

**Component Information** 

Chemical name	Partition coefficient		
Glycerol	-1.75		
56-81-5			

Other adverse effects

No information available.

# 13. Disposal considerations

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.				

# 14. Transport information

DOT

Not regulated

### 15. Regulatory information

International Inventories

DSL/NDSL	
EINECS/ELINCS	
ENCS	
IECSC	
KECL	
PICCS	
AICS	

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances **ENCS** - Japan Existing and New Chemical Substances

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**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Glycerol	Х	X	Х
56-81-5			
Phosphoric acid, disodium salt	Х	X	Х
7558-79-4			

#### U.S. EPA Label Information

#### EPA Pesticide Registration Number Not applicable

16. Other information						
NFPA HMIS	Health hazards 2 Health hazards 2	Flammability Flammability		Instability 0 Physical hazards	0	Special hazards - Personal protection X
Key or legend to abbreviations and acronyms used in the safety data sheetLegendSection 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONTWATime weighted averageSTELCeilingMaximum limit value*Skin designation						
Agency for Toxic St U.S. Environmental European Food Saf EPA (Environmental Acute Exposure Gu U.S. Environmental V.S. Environmental Food Research Jou Hazardous Substar International Uniford Japan GHS Classifi Australia National In NIOSH (National In National Library of I U.S. National Toxic New Zealand's Che Organization for Ec	ince Database m Chemical Information Data ication ndustrial Chemicals Notificati stitute for Occupational Safet Medicine's ChemID Plus (NLI Medicine's PubMed database ology Program (NTP) emical Classification and Infor onomic Co-operation and De onomic Co-operation and De onomic Co-operation and De	stry (ATSDR) w Database nsecticide, Fungicia duction Volume Ch base (IUCLID) on and Assessmer y and Health) M CIP) (NLM PUBMED) mation Database ( velopment Environ velopment High Pr	de, and Ro emicals tt Scheme CCID) ment, Hea oduction V	(NICNAS) Ith, and Safety Public olume Chemicals Pro		
Revision Date Revision Note	2023-12- No inform	29 nation available.				

#### **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