

Safety Data Sheet (SDS)

Date of Issue: 03/15/2018

Rev 001

Enzyme

Section 1. Identification

Product Identifier

Catalog Number: 10024, 10096, 11010, 11050, 20024, 20096, 21024, 21096, 23024, 23096, 30024, 30096, 33096, 71016, AL-50048, AL-51048, AL-52048, AL-53048, AL-55048, AL-56248, AL-57048

Recommended use of the chemical and restrictions on use.
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Manufacture/Supplier Details: Swift Biosciences, Inc.
58 Parkland Plaza, Suite 100
Ann Arbor, MI 48103

Emergency Telephone Numbers

CHEMTREC Emergency Phone Number: (800) 424-9300
Chemtrec should only be called in a chemical emergency (spill, leak, fire, exposure, or accident)

Section 2. Hazards Identification

Classification of the substance/mixture: Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements

The substance is classified and labeled according to the Globally Harmonized System (GHS). Not a hazardous substance or mixture.

Hazard statements: None

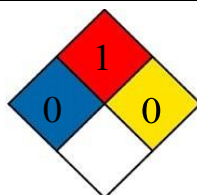
Signal word: None

Precautionary Statements: None

HMIS rating (Scale 0-4):

HEALTH	0
FIRE	1
REACTIVITY	0

NFPA Rating:



Hazards not otherwise classified: None

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Section 3. Composition/Information On Ingredients			
Chemical Name	Identifiers	Hazardous	Approximate Percentage %
Glycerol	CAS: 56-81-5	hazardous	25-50%
Potassium Phosphate	CAS: 778-77-0	nonhazardous	-
Tris Base	CAS: 77-86-1	nonhazardous	-
EDTA	CAS: 60-00-4	nonhazardous	-
Potassium Chloride	CAS: 7447-40-7	nonhazardous	-
Zinc Chloride	CAS: 7646-85-7	not considered hazardous at given concentration	-
Dithiothreitol	CAS: 3483-12-3	not considered hazardous at given concentration	-
Sodium Chloride	CAS: 7647-14-5	nonhazardous	-
Triton X-100	CAS: 9002-93-1	not considered hazardous at given concentration	-
Adenosine Triphosphate (ATP)	CAS: 34369-07-8	nonhazardous	-

Chemical Characterization: Mixture

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Hazardous/Non-hazardous Components:

Glycerol 25-50%; Potassium Phosphate, Tris Base, EDTA, Potassium Chloride, Zinc Chloride, Dithiothreitol, Sodium Chloride, Triton X-100, ATP. The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

Section 4. First-Aid Measures

Description of necessary measures

- Inhalation: Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Skin: Wash exposed area with soap and water. If symptoms arise, call a physician.
- Eye: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms arise, call a physician.
- Ingestion: Give several glasses of milk or water. Vomiting may occur spontaneously, but it is not necessary to induce. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

No further relevant information available

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Indication of any immediate medical attention and special treatment needed

All treatment should be based on observed sign and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5. Fire Fighting Measures

Extinguishing media:

Suitable extinguishing media:

Carbon dioxide, dry chemical, water spray, or alcohol resistant foam.

Unsuitable Extinguishing:

None known

Special hazards arising from the substance or mixture

Unusual fire and explosion hazards:

No specific fire or explosion hazard

Hazardous Combustions products:

None known

Special protective equipment and precautions for the fire-fighters:

Wear self-contained breathing apparatus and protective suit.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental precautions

Avoid run off to waterways and sewers.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

Dispose contaminated material as waste according to item 13.

Section 7. Handling And Storage

Precautions for safe handling:

Avoid inhalation and prolonged exposure. Use personal protective equipment such as gloves, goggles, and lab coat. Avoid contact with eyes, skin, and clothing.

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Conditions for safe storage, including any incompatibilities

Storage:

Keep tightly closed in properly labeled containers; store at directed temperature indicated on label.

Incompatible materials or Ignition sources:

No dangerous reactions known.

Section 8. Exposure Controls/Personal Protection

Control parameters

Occupational exposure Limit values (OSHA PEL):

Glycerol: 15mg/m³ total dust; 5mg/m³ respirable fraction.

Appropriate engineering controls:

Safety shower and eye wash. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye protection:

Safety glasses with side-shields.

Hand Protection:

Impervious gloves.

Respiratory Protection:

None required under normal conditions of use.

Skin and body protection

Lightweight protective clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

Prevent product from entering drains.

Section 9. Physical And Chemical Properties

Appearance:

Clear liquid

Odor:

Faint

Odor Threshold:

No data available

pH:

8.0 at 20°C

Melting point/freezing point:

No data available

Initial boiling point & boiling range:

100°C

Flash point:

> 100°C

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Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Partition coefficient:	No data available
Vapor pressure:	0.1hPa at 20°C
Vapor density:	No data available
Relative density (water):	No data available
Solubility:	Soluble in water
Upper/lower flammability or explosive limits:	Lower limit: 0.9%, Upper limit: No data available
Auto-ignition temperature:	Not applicable
Ignition temperature:	400°C
Decomposition temperature:	No data available
Viscosity:	No data available
Oxidizing properties:	No data available
Other information:	None

Section 10. Stability And Reactivity

Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Under normal conditions of storage and usage, hazardous reactions should not occur.
Conditions to avoid	No specific data.
Incompatible materials	None known.
Hazardous decomposition products:	Under normal conditions of storage and usage, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

Product/Ingredient Name	CAS	Result	Species	Dose	Exposure
Enzyme	Not available	Not available	Not available	Not available	Not available

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Irritation/Corrosion

Product/Ingredient Name	Result	Species	Score	Exposure/Observation
Enzyme	Not available	Not available	Not available	Not available

Sensitization: Not available

Mutagenicity: Not available

Carcinogenicity

Product/Ingredient Name	OSHA	IARC	NTP
Enzyme	None of the ingredients listed	None of the ingredients listed	None of the ingredients listed

Reproductive toxicity: Not available

Teratogenicity: Not available

Specific target organ toxicity- single exposure None under normal use conditions

Specific target organ toxicity- repeated exposure May cause kidney damage (Nephrotoxin).

Aspiration Hazard Not available

Information on the likely routes of exposure

Routes of entry anticipated: Oral May be harmful if swallowed

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: May cause eye irritation with susceptible persons.

Inhalation: May be harmful by inhalation.

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Skin contact: May cause skin irritation in susceptible persons.

Ingestion: May be harmful if swallowed.

Aspiration Hazard: Not available.

Delayed and immediate effects and also chronic effects from short and long term exposure
May cause kidney damage (Nephrotoxin).

Numerical measures of toxicity
Not Available

Section 12. Ecological Information

Toxicity

Product/ingredient name	Result	Species	Exposure
Enzyme	Not available	Not available	Not available

Persistence and degradability: Not available.

Biodegradation: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Other adverse effects: Slightly hazardous for water. Prevent product from entering drains.

Aspiration Hazard: Not available.

Section 13. Disposal Considerations

Waste treatment methods

Product waste: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

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Section 14. Transport Information

	UN Number	UN proper shipping name	Transport hazard class(es)	Packaging group	Environmental Hazards
DOT	Not regulated	No information available	No information available	No information available	None
IMDG	Not regulated	No information available	No information available	No information available	None
IATA	Not regulated	No information available	No information available	No information available	None

Special Precautions for user

None specified.

IATA:

Proper shipping name: Not classified as dangerous in the meaning of transport regulations.

Hazard class None

Subsidiary class None

Packing group None

UN-No None

Marine pollutant The mixture consists of components of unknown hazards to the aquatic environment.

DOT: This substance is considered to be non-hazardous for transport. No shipping name required.

Section 15. Regulatory Information

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

Sara:	Not applicable.
Section 355 (Extremely hazardous substances):	This product is not regulated by SARA.
Section 313 (Specific toxic chemical listings):	This product is not regulated by SARA.
SARA 311/312 Hazards:	Not available.
Chemicals known to cause cancer:	Not available.
Chemicals known to cause reproductive toxicity for females:	Not available.
Chemicals known to cause reproductive toxicity for males:	Not available.
Chemicals known to cause developmental delay:	Not available.
Carcinogenic categories:	Not available.
EPA (Environmental protection agency):	Carcinogenicity categories: 7646-85-7 zinc chloride.

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Water Hazard Class:	Water hazard class 1 – slightly hazardous for water.
TLV (Threshold limit value established by ACGIH):	Not available.
NIOSH-CA (National Institute for Occupational Safety and Health):	Not available.
OSHA-CA (Occupational Safety and Health Administration):	Not available.
Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):	This product does not contain HAPs.
U.S. State Regulations:	Glycerol is listed under MA-RTK.
TSCA (Toxic substances control act) California Proposition 65:	This product does not contain chemicals listed under Proposition 65.
International Inventories:	Glycerol is listed under TSCA, PICCS, ENCS, DSL, and AICS.
WHMIS hazard class:	Non-controlled
GHS label elements:	Not available.
Hazard pictograms:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.
Signal Word:	Not available.
Hazard-determining components of labeling:	Not available.
Hazard statements:	Not available.
Precautionary statements:	Not available.
National regulations:	Not available.
State right to know:	Not available.
Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

Section 16. Other Information

Disclaimer/Statement of Liability: The information contained herein is believed to be accurate but is not warranted to be so. Data and calculation are based on information furnished by the manufacturers of the components of the product. Uses are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in section 1.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Swift Biosciences, Inc Shall not be held liable for any damage resulting from handling or from contact with the above product. Swift Biosciences, Inc

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