

Safety Data Sheet

Revision date 25-Dec-2023

Version 1.0

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

Identification of the substance or mixture

Product code EG15533
Product name LightNing® DpnII

Company/undertaking identification

Jiangsu Yugong Biotech Co., Ltd.
Building E, International Pharmaceutical Innovation Industrial Park,
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For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

GHS Classification

Signal Word None
Health hazards Not classified
Physical hazards Not classified
Hazard Statements Not Applicable
Precautionary Statements Not Applicable

Principle Routes of Exposure

Potential Health Effects

Eyes May cause eye irritation with susceptible persons
Skin May cause skin irritation in susceptible persons
Inhalation May be harmful by inhalation.
ingestion May be harmful if swalloweed

Specific effects

Carcinogenic effects None

| | |
|------------------------------|----------------------------------|
| Mutagenic effects | None |
| Reproductive toxicity | None |
| Sensitization | None |
| Target Organ Effects | None under normal use conditions |

Other hazards

Not Applicable

HMIS

| | |
|--------------|---|
| Health | 0 |
| Flammability | 0 |
| Reactivity | 0 |

SECTION 3: Composition/information on ingredients

| Chemical Name | OSHA PEL | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|---------------|---|--------------------|-----------------|------------------|
| Glycerol | 15 mg/m ³ 5 mg/m ³ | None | None | None |

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 first aid measures

| | |
|---------------------------|---|
| Inhalation | Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration |
| Eye contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Skin contact | Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice. |
| Ingestion | Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice |
| Note to physicians | Treat symptomatically. |

Most important symptoms and effects, both acute and delayed

Not Applicable.

Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective suit.

Special hazards arising from the substance or mixture

Not known

Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Always wear recommended Personal Protective Equipment

Use personal protection equipment

See section 8 for more information

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Storage Conditions

Store at -25°C to -15°C.

Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

| | |
|-----------------------------|---|
| Exposure Limits | Contains no substances with occupational exposure limit values. |
| Engineering measures | Ensure adequate ventilation, especially in confined areas |

Exposure controls

Personal Protective Equipment

| | |
|---------------------------------|---|
| Respiratory protection | In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards. |
| Hand protection | Wear suitable gloves. Glove material: Compatible chemical-resistant gloves. |
| Eye protection | Tight sealing safety goggles |
| Skin and Body Protection | Wear suitable protective clothing. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice |

| | |
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| Environmental exposure controls | No special environmental precautions required. |
|--|--|

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|---|-------------|
| Physical state | liquid |
| Color | Transparent |
| Odor | No data |
| Molecular Weight | No data |
| Melting point / melting range | No data |
| Boiling point / boiling range | No data |
| Flammability (solid, gas) | No data |
| Lower explosion limit | No data |
| Upper explosion limit | No data |
| Flash point | No data |
| Autoignition Temperature | No data |
| Decomposition temperature | No data |
| pH | No data |
| Evaporation rate | No data |
| Viscosity | No data |
| Solubility | No data |
| Partition coefficient: n-octanol/water | No data |

| | |
|---------------------------------|---------|
| Vapor Pressure | No data |
| Specific gravity | No data |
| Relative density | No data |
| Vapor density | No data |
| Explosive properties | No data |
| Oxidizing properties | No data |
| Particle characteristics | No data |

Other information

Information with regard to physical hazard classes

No information available

Other safety characteristics

No information available

SECTION 10: Stability and reactivity

| | |
|---|---|
| Reactivity | None known. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous reaction has not been reported. |
| Conditions to avoid | No information available. |
| Incompatible materials | Strong acids and oxidizing agents. Acetic anhydride. Isocyanates. Ammonia. Bases. |
| Hazardous decomposition products | Carbon oxides. |

SECTION 11: Toxicological information

Acute Toxicity

| Chemical Name | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LC50 (inhalation, rat/mouse) |
|---------------|---------------------------|------------------------------|---------------------------------|
| Glycerol | = 12600 mg/kg Oral | No data available | >570 mg/m ³ (Rat) |

Information on toxicological effects

There is no evidence available indicating acute toxicity.

Principal Routes of Exposure

| | |
|----------------------------------|--|
| Acute toxicity | Data are conclusive but insufficient for classification. |
| Skin corrosion/irritation | May cause skin irritation in susceptible persons. |

| | |
|--|--|
| Serious eye damage/irritation | May cause eye irritation with susceptible persons. |
| Respiratory or skin sensitization | Data are conclusive but insufficient for classification. |
| Specific target organ toxicity (STOT)–single exposure | None under normal use conditions. |
| Specific target organ toxicity (STOT)–repeated exposure | None under normal use conditions.. |
| Carcinogenicity | None. |
| Germ cell mutagenicity | Data are conclusive but insufficient for classification. |
| Reproductive toxicity | None. |
| Aspiration hazard | Data are conclusive but insufficient for classification. |

SECTION 12: Ecological information

Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

| | |
|--------------------------------------|------------------------------------|
| Mobility in soil | see log Pow. |
| Persistence and degradability | No information available. |
| Bioaccumulative potential | Material does not bioaccumulate. . |

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

| | |
|------------------------------|--------------------------|
| Other adverse effects | No information available |
|------------------------------|--------------------------|

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulation

| | |
|-----------------------------------|---|
| UN number or ID number | Not Applicable |
| UN proper shipping name | No dangerous good in sense of these transport regulations |
| Transport hazard class(es) | Not Applicable |
| Packing group | Not Applicable |

Environmental hazards Not Applicable

Special precautions for user Not Applicable

Maritime transport in bulk according to IMO instruments

Not Applicable

SECTION 15: Regulatory information**US Federal Regulations****SARA 313**

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations – Brazil

Not regulated.

SECTION 16: Other information**References**

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

Abbreviations and acronyms

TWA - Time-Weighted Average

OELs - Occupational Exposure Limits

STEL - Short Term Exposure Limit

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

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

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

CEPA - Canadian Environmental Protection Act

EPA - Environmental Protection Agency

OSHA - Occupational Safety and Health Administration of the US Department of Labor

IATA - International Air Transport Association

DOT - Department of Transportation

IMDG - International Maritime Dangerous Goods

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

AIHA - American Industrial Hygiene Association

HMIS - Department of Defense Hazardous Materials Information System

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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End of Safety Data Sheet