

# **1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	:	Lyophosome™ made from Diether Lipids
Product Number	:	LDE-510
Brand	:	LYOPHOSOME™
Company Address	:	ENCAPSULA NANOSCIENCES LLC 5409 MARYLAND WAY, SUITE 360 BRENTWOOD, TN, 37027
Technical Phone Fax	:	615-884-4442 615-250-8747
Emergency Phone	:	615-438-8553

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS#
TREHALOSE DIHYDRATE	6138-23-4
1,2-di-O-hexadecyl-sn-glycero-3-phosphocholine	36314-47-3
Cholesterol	57-88-5



# 3. HAZARDS IDENTIFICATION

#### OSHA

No known OSHA hazards.

## **GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS**

Not a hazardous mixture of substance

HMIS RATING	
HEALTH HAZARDS:	0
FLAMMABILITY:	0
CHRONIC HEALTH HAZARDS:	0
PHYSICAL HAZARDS:	0

NFPA RATING	
HEALTH HAZARD:	0
FLAMMABILITY:	0
REACTIVITY:	0

## POTENTIAL HEALTH EFFECTS

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
	, , , ,
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.
0	

# 4. FIRST AID MEASURES

## **ORAL EXPOSURE**

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

$\frown$

## INHALATION EXPOSURE

If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.



## **DERMAL EXPOSURE**

In case of contact, immediately wash skin with soap and copious amounts of water. Contact a physician.





## **EYE EXPOSURE**

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Contact a physician.

## 5. FIRE FIGHTING MEASURES

#### FLAMMABILITY

Not flammable or combustible.



## **EXTINGUISHING MEDIA**

It is suitable to use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## HAZARDOUS COMBUSTION PRODUCTS

Hazardous decomposition products formed under fire conditions, carbon oxides, nitrogen oxides and sulfur oxides.

## 6. ACCIDENTAL RELEASE MEASURES

## METHODS FOR CLEANING UP

Absorb any spilled material quickly using absorbent pads. Wipe area to remove as much of the liquid as possible. Apply bleach to the affected area and let sit for several hours. Clean the affected area thoroughly with soap and water to remove the bleach. Collect all cleanup materials and dispose of them in accordance with local, state and federal waste disposal laws.



## **ENVIRONMENTAL PRECAUTIONS**

Do not let product enter drains. If safe to do so prevent further leakages or spills.

## PERSONAL PRECAUTIONS

Use personal protective equipment. Avoid breathing in vapors, mist or gas. Ensure adequate ventilation. Prepare evacuation sites.

## 7. HANDLING AND STORAGE

## HANDLING



User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Wash hands thoroughly after handling.



#### STORAGE

Suitable: Keep in tightly closed container. Keep frozen at -40 C.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### **ENGINEERING CONTROLS**

Appropriate industrial hygiene.





Respiratory: Where protection is desired, use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand: Compatible chemical-resistant gloves

Eye: Where protection is desired, use chemical safety goggles with side shades conforming to EN166.



Skin and Body: Wear a complete suit protecting against chemicals, if desired.



## **GENERAL HYGIENE MEASURES**

Solid

Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White,
Safety data	N/A
Melting point	N/A
Boiling point	N/A
Flash point	N/A
Ignition Temperature	N/A
Lower explosion limit	N/A
Upper Explosion limit	N/A
Water Solubility	N/A
Density	N/A

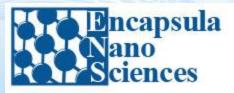
## **10.STABILITY AND REACTIVITY**

#### **STORAGE STABILITY**

Store under recommended conditions.

#### **MATERIALS TO AVOID**

Strong oxidizing agents



## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products formed under fire conditions- Carbon oxides, nitrogen oxides, sulfur oxides.

## **11.TOXICOLOGICAL INFORMATION**

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as
	probable, possible or confirmed human carcinogen by the IARC.
OHSA:	No component of this product present at levels greater than or equal to 0.1% is identified as
	probable, possible or confirmed human carcinogen by the OHSA.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as
	probable, possible or confirmed human carcinogen by the ACGIH.
EPA:	No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by the EPA.

## ACUTE TOXICITY

No data available

#### Irritation and Corrosion

No data available

## **ROUTE OF EXPOSURE**

Skin Contact:	May cause skin irritation
Skin Absorption:	May be harmful if absorbed through the skin
Eye Contact:	May cause eye irritation
Inhalation:	Materials may be irritating to mucous membranes and upper respiratory tract.
Ingestion:	May be harmful if swallowed

## SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **12.ECOLOGICAL INFORMATION**

Elimination information (persistence and degradability)	N/A
Ecotoxicity effects	N/A
Further information on ecology	N/A



# **13.DISPOSAL CONSIDERATIONS**

## PRODUCT

Observe all federal, state, and local environment regulations. Contact a licensed professional waste disposal service to remove this material.

#### **CONTAMINATED PACKAGING**

Dispose of as unused product.

## **14.TRANSPORT INFORMATION**

- DOT (US) Not dangerous goods
- IMDG Not dangerous goods
- IATA Not dangerous goods

## **15. REGULATORY INFORMATION**

#### **OSHA HAZARDS**

No known OSHA hazards

#### SARA 302 COMPONENTS

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

## SARA 313 COMPONENTS

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed threshold (De Minimis) reporting levels established by SARA Title III, Section 313

#### SARA 311/312 HAZARDS

No SARA hazards



## MASSACHUSETTS RIGHT TO KNOW COMPONENTS

	CAS-No.	Revision Date	
No components are subject to the Massachusetts Dight	to Know Act		
No components are subject to the Massachusetts Right	to know Act.		
PENNSYLVANIA RIGHT TO KNOW COMPONENTS			
	CAS-No.	Revision Date	
TREHALOSE DIHYDRATE	6138-23-4		
1,2-di-O-hexadecyl-sn-glycero-3-phosphocholine	36314-47-3		
Cholesterol	57-88-5		

## NEW JERSEY RIGHT TO KNOW COMPONENTS

	CAS-No.	Revision Date
TREHALOSE DIHYDRATE	6138-23-4	
1,2-di-O-hexadecyl-sn-glycero-3-phosphocholine	36314-47-3	
Cholesterol	57-88-5	

## **CALIFORNIA PROP. 65 COMPONENTS**

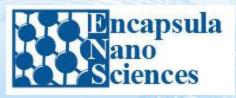
This product does not contain any chemicals known to the state of CA to cause cancer, birth, or other reproductive defects.

## **16. OTHER INFORMATION**

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The above information is believed to be correct but does not support to be all inclusive and shall be used only as a guide.

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.



It does not represent any guarantee of the properties of the product. Encapsula NanoSciences LLC shall not be held liable for any damage resulting from handling or from contact with the above product.