Section 1 - Product and Company Information

Product Name: LyoVec™

Cat. Code: lyec-1, lyec-12, lyec-2, lyec-22

Company identification:
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Emergency number: ORFILA (INRS): +33 (0)1 45 42 59 59

Disclaimer: All InvivoGen products are supplied for research and laboratory use only. Not for drug, household or other uses.

Section 2 – Hazards Identification

Emergency Overview:
OSHA Hazards
Irritant

GHS classification
According to Regulation (EC) No. 1272/2008
Eye irritation (Category 2)

Irritating to eyes.

GHS Label elements, including precautionary statements
Pictogram

Signal word Warning

Hazard statement
H319 Causes serious eye irritation.

Precautionary statement(s)
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Section 3 – Composition/Information on Ingredient

LyoVec™ contains the components listed below.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>GHS Classification</th>
<th>Pictogram</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTCP TA (Di-tetradecylphosphoryl-N,N,N-trimethylmethanaminium chloride)</td>
<td>Not available</td>
<td>Eye irritation (Category 2); H319, P305+ P351+P338</td>
<td>!</td>
</tr>
<tr>
<td>DiPPE (1,2-Diphytanoyl-sn-glycero-3-phosphoethanolamine)</td>
<td>201036-16-0</td>
<td>Not dangerous</td>
<td>None</td>
</tr>
</tbody>
</table>

Section 4 – First Aid Measures

General advice: Consult a physician. Show this material safety data sheet to the doctor in attendance.

After skin contact: Immediately wash skin with soap and plenty of water. Consult a physician.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water provided person is conscious. Consult a physician.

After inhalation: Remove to fresh air. If not breathing give artificial respiration. Consult a physician.

After eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

Section 5 – Fire Fighting Measures

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate foam.

Specific hazards arising from the chemical: No data available.

Special Firefighting Procedures: Wear self-contained breathing apparatus for fire fighting if necessary.

Section 6 – Accidental Release Measures

Personal precautions: Wear protective equipment. Keep unprotected persons away. Avoid dust formation.

Method for Cleaning Up: Sweep up and place in closed containers for disposal. Dispose contaminated material as waste according to section 13. Ventilate area and wash spill site after material clean-up is complete.

Section 7 – Handling and Storage

Handling: Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

User Exposure: Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or apron).

Storage: Keep tightly closed. Store at 4 °C.

Section 8 – Exposure Controls / PPE

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses.

Hygiene measures

General industrial hygiene practice.
Section 9 – Physical / Chemical Properties

**Appearance**
Physical state: Solid
Color: White

**Safety Data**
Odor: No data available
Odor threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability: No data available
Upper/lower flammability or explosive limits: No data available
Vapor pressure: No data available
Relative density: No data available
Solubility: No data available
Partition coefficient: n-octanol/water: No data available
Autoignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available

Section 10 – Stability and Reactivity

**Reactivity:** No data available
**Chemical stability:** Stable under recommended storage conditions
**Possibility of hazardous reactions:** No data available
**Conditions to avoid:** No data available
**Incompatible materials:** No data available
**Hazardous decomposition products:** No data available

Section 11 – Toxicological Information

**Acute toxicity:**
Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other information on acute toxicity: No data available
**Skin corrosion/irritation:** No data available
**Serious eye damage/irritation:** No data available
**Respiratory or skin sensitization:** No data available
**Germ cell mutagenicity:** No data available
**Carcinogenicity:** No data available
**Reproductive toxicity:** No data available
**Additional information:** No data available

Section 12 – Ecological Information

**Ecotoxicity:** No data available
**Persistence and degradability:** No data available
**Bioaccumulative potential:** No data available
**Mobility in soil:** No data available
Section 13 – Disposal Considerations

Product: Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.
Contaminated Packaging: Dispose of as unused product.

Section 14 – Transport Information

ARD/RID: Not dangerous goods
DOT (US): Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

15.2 Chemical Safety Assessment
no data available

Section 16 – Other Information

The information contained in this MSDS relates only to the material(s) designated and does not relate to use(s) in combination with any other material, process(es) and/or chemical reaction(s). InvivoGen provides this information in good faith and is based on our present knowledge. This MSDS is provided without warranty of any kind. The recipient is responsible for ensuring that, where applicable, existing laws and guidelines are observed.