1. PRODUCT AND COMPANY IDENTIFICATION

Product name :  \textit{N-}(3-\textit{Oxododecanoyl})-L-homoserine lactone

Product Number : O9139

Brand : Sigma

Company : Sigma-Aldrich

3050 Spruce Street
SAINT LOUIS MO  63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052
Emergency Phone # : (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 3-Oxo-C_{12}-HSL

Formula : \textit{C}_{16}\textit{H}_{27}\textit{NO}_{4}

Molecular Weight : 297.39 g/mol

\begin{tabular}{ |c|c|c|c| }  
\hline
CAS-No. & EC-No. & Index-No. & Concentration \\
\hline
168982-69-2 & - & - & - \\
\hline
\end{tabular}

3. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Harmful by ingestion.

HMIS Classification

\begin{tabular}{ |c| }  
\hline
Health Hazard: 1  
Flammability: 0  
Physical hazards: 0  
\hline
\end{tabular}

NFPA Rating

\begin{tabular}{ |c| }  
\hline
Health Hazard: 1  
Fire: 0  
Reactivity Hazard: 0  
\hline
\end{tabular}

Potential Health Effects

\begin{tabular}{ |c| }  
\hline
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.  
\hline
\end{tabular}
Ingestion
Harmful if swallowed.

4. FIRST AID MEASURES

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

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Flammable properties
Flash point no data available
Ignition temperature no data available

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions
Do not let product enter drains.

Methods for cleaning up
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

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

Recommended storage temperature: -20 °C
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**
Handle with gloves. For prolonged or repeated contact use protective gloves.

**Eye protection**
Safety glasses with side-shields conforming to EN166

**Skin and body protection**
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
Form: solid

**Safety data**
- pH: no data available
- Melting point: no data available
- Boiling point: no data available
- Flash point: no data available
- Ignition temperature: no data available
- Lower explosion limit: no data available
- Upper explosion limit: no data available
- Water solubility: no data available
- Partition coefficient: log Pow: 2.563

10. STABILITY AND REACTIVITY

**Storage stability**
Stable under recommended storage conditions.

**Materials to avoid**
Strong oxidizing agents

**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION
**Acute toxicity**
no data available

**Irritation and corrosion**
no data available

**Sensitisation**
no data available

**Chronic exposure**

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 IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Signs and Symptoms of Exposure**

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

**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** Harmful if swallowed.

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**12. ECOLOGICAL INFORMATION**

**Elimination information (persistence and degradability)**
no data available

**Ecotoxicity effects**
no data available

**Further information on ecology**
no data available

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**13. DISPOSAL CONSIDERATIONS**

**Product**
Observe all federal, state, and local environmental regulations.

**Contaminated packaging**
Dispose of as unused product.

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**14. TRANSPORT INFORMATION**
15. REGULATORY INFORMATION

OSHA Hazards
Harmful by ingestion.

DSL Status
This product contains the following components that are not on the Canadian DSL nor NDSL lists.

N-(3-Oxo-dodecanoyl) homoserine lactone  CAS-No.  168982-69-2

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 the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

N-(3-Oxo-dodecanoyl) homoserine lactone  CAS-No.  168982-69-2

New Jersey Right To Know Components

N-(3-Oxo-dodecanoyl) homoserine lactone  CAS-No.  168982-69-2

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information
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