SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Substance
Product Name: CE-1295
CAS No: 111-82-0
Synonyms: Methyl Hexadecanoate, Methyl Dodecanoate, Methyl Laurate, and Methyl Palmitate

Intended Use of the Product

Use of the Substance/Mixture:
Production of amides, methyl ester sulfonates, rolling oils, low-volume solvents, and metal working fluids.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)
- Aquatic Acute 1: H400
- Aquatic Chronic 2: H411

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):

Signal Word (GHS-US): Warning

Hazard Statements (GHS-US):
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US):
- P273 - Avoid release to the environment.
- P391 - Collect spillage.
- P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
SAFETY DATA SHEET, CE-1295

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substances</th>
<th>Name</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dodecanoic acid, methyl ester</td>
<td>(CAS No) 111-82-0</td>
<td>95 - 100</td>
</tr>
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</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

**Description of First Aid Measures**

**General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation**: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact**: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

**Eye Contact**: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion**: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor.

**Most Important Symptoms and Effects Both Acute and Delayed**

**General**: Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation**: Overexposure may be irritating to the respiratory system.

**Skin Contact**: Contact during a long period may cause slight irritation.

**Eye Contact**: Direct contact with the eyes is likely irritating.

**Ingestion**: Ingestion is not likely to be harmful or have adverse effects.

**Chronic Symptoms**: None expected under normal conditions of use.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media**: Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media**: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Special Hazards Arising From the Substance or Mixture**

**Fire Hazard**: Not considered flammable but may burn at high temperatures.

**Explosion Hazard**: Product is not explosive.

**Reactivity**: Hazardous reactions will not occur under normal conditions.

**Advice for Firefighters**

**Precautionary Measures Fire**: Exercise caution when fighting any chemical fire.

**Firefighting Instructions**: Use water spray or fog for cooling exposed containers.

**Protection During Firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products**: Carbon oxides (CO₂).

**Reference to Other Sections**: Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**
SECTION 6: ACCIDENTAL RELEASE MEASURES

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (dust).

For Non-Emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).
General Measures: Avoid all unnecessary contact.

For Emergency Personnel
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions
Prevent entry to sewers and public waters. Notify authorities if solid enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Solid spill: Collect as any solid.
Methods for Cleaning Up: Vacuum clean-up is preferred. If sweeping is required, use as a dust suppressant. Avoid generation of dust during clean-up of spills. Contact competent authorities after a spill.

Reference to Other Sections
See section 8, Exposure Controls and Personal Protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls
Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.


Materials for Protective Clothing: Chemically resistant materials and fabrics.
Hand Protection: Wear chemically resistant protective gloves.
Eye Protection: Chemical safety goggles.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.
Environmental Exposure Controls: Do not allow the product to be released into the environment.
Consumer Exposure Controls: Do not eat, drink or smoke during use.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

- **Physical State**: Solid
- **Appearance**: Water white to Yellow
- **Odor**: Musty
- **Odor Threshold**: Not available
- **pH**: Not available
- **Evaporation Rate**: Not available
- **Melting Point**: Not available
- **Freezing Point**: Not available
- **Boiling Point**: > 204.4 °C (400 °F) @ 760 mmHg
- **Flash Point**: > 115.6 °C (240 °F) (Closed-cup)
- **Auto-ignition Temperature**: Not available
- **Decomposition Temperature**: Not available
- **Flammability (solid, gas)**: Not available
- **Lower Flammable Limit**: Not available
- **Upper Flammable Limit**: Not available
- **Vapor Pressure**: @ 22° C (72° F) < 1 mm Hg
- **Relative Vapor Density at 20 °C**: Not available
- **Relative Density**: 0.87 @ 25° C
- **Specific Gravity**: Not available
- **Solubility**: Water: Negligible @ 22° C (72° F)
- **Partition Coefficient: N-Octanol/Water**: Not available
- **Viscosity**: Not available

**Explosion Data – Sensitivity to Mechanical Impact**: Not expected to present an explosion hazard due to mechanical impact.

**Explosion Data – Sensitivity to Static Discharge**: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

- **Reactivity**: Hazardous reactions will not occur under normal conditions.
- **Chemical Stability**: Stable under recommended handling and storage conditions (see section 7).
- **Possibility of Hazardous Reactions**: Hazardous polymerization will not occur.
- **Conditions to Avoid**: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.
- **Incompatible Materials**: Strong acids, strong bases, strong oxidizers.
- **Hazardous Decomposition Products**: Does not decompose up to 177° C (350° F). When heated to decompose, emits acrid smoke and irritating vapors.

SECTION 11 - TOXICOLOGICAL INFORMATION

**Information on Toxicological Effects - Product**

- **Acute Toxicity**: Not classified
- **LD50 and LC50 Data**: Not available
- **Skin Corrosion/Irritation**: Not classified
- **Serious Eye Damage/Irritation**: Not classified
- **Respiratory or Skin Sensitization**: Not classified
- **Germ Cell Mutagenicity**: Not classified
- **Teratogenicity**: Not available
- **Carcinogenicity**: Not available
SAFETY DATA SHEET, CE-1295

SECTION 11 - TOXICOLOGICAL INFORMATION

Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.
Symptoms/Injuries After Skin Contact: Contact during a long period may cause slight irritation.
Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.
Symptoms/Injuries After Ingestion: Ingestion is not likely to be harmful or have adverse effects.
Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

<table>
<thead>
<tr>
<th>LD50 and LC50 Data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dodecanoic acid, methyl ester (111-82-0)</td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified
Ecology – General: Very toxic to the aquatic environment with long lasting effects.

Dodecanoic acid, methyl ester (111-82-0)

| LC50 Fish 1 | > 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |

Persistence and Degradability
May cause long-term adverse effects in the environment

Bioaccumulative Potential

Dodecanoic acid, methyl ester (111-82-0)

| Log Pow | 6.02 |

Mobility in Soil Not available

Other Adverse Effects
Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.
Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport
SAFETY DATA SHEET, CE-1295

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Dodecanoic acid, methyl ester (111-82-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Dodecanoic acid, methyl ester (111-82-0)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

CE-1295 (111-82-0)
Dodecanoic acid, methyl ester (111-82-0)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification | Class D Division 2 Subdivision B - Toxic material causing other toxic effects

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

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 06/02/2015
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

| Aquatic Acute 1 | Hazardous to the aquatic environment - Acute Hazard Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment - Chronic Hazard Category 2 |
| H400 | Very toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |

Party Responsible for the Preparation of This Document

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SDS NA Peter Cremer