



SDS-1114

SAFETY DATA SHEET

Section 1. Product and Company Identification

Product Name: Bacterial Acid Methyl Esters CP Mixture
Product Number(s): 1114
Source: Various
Product Use: This product is to be used for research only. It is not intended for drug or diagnostic use, human consumption or to be used in food or food additives.

Matreya LLC
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Web: www.matreya.com

24 Hour Emergency Number: Chemtrec
800-424-9300 (within United States) **703-527-3887** (International)

Section 2. Hazards Identification

Emergency Overview:
Target Organs: Central nervous system, eyes, skin
GHS Classification: Flammable liquids, Category 3
Acute toxicity, Dermal, Category 5

GHS Label Elements:
Pictogram(s):



Signal Word: **Warning**

Health Code
H226
H313
Hazard statement(s):
Flammable liquid and vapors
May be harmful in contact with skin.

Prevention Code
P210
P233
P240
P241
P242
P243
P280
Prevention Statement(s):
Keep away from heat/sparks/open flames/hot surfaces. -No smoking
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.

| | |
|--|--|
| Response Code P303, P361, P353 | Response Statement(s): IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P370, P378 | In case of fire: Use dry chemical, appropriate foam, or carbon dioxide; water spray for extinction. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| Storage Code P403, P235 | Storage Statement(s): Store in a well-ventilated place. Keep cool. |
| Disposal Code P501 | Disposal Statement(s): Disposal of contents/container in accordance to local/regional/national/international regulation. |

Section 3. Composition/Information on Ingredients

| Product Name | CAS Number | Percent |
|--|------------|---------|
| Methyl caproate | 106-70-7 | 98.88 |
| Methyl undecanoate | 1731-86-8 | 0.043 |
| Methyl 2-hydroxydodecanoate | 71271-24-4 | 0.043 |
| Methyl dodecanoate | 111-82-0 | 0.043 |
| Methyl tridecanoate | 1731-88-0 | 0.043 |
| Methyl 2-hydroxydodecanoate | 51067-85-7 | 0.043 |
| Methyl 3-hydroxydodecanoate | 85464-97-7 | 0.043 |
| Methyl tetradecanoate | 124-10-7 | 0.043 |
| Methyl 13-methyltetradecanoate | 5129-59-7 | 0.043 |
| Methyl 12-methyltetradecanoate | 5129-66-8 | 0.043 |
| Methyl pentadecanoate | 7132-64-1 | 0.043 |
| Methyl 2-hydroxytetradecanoate | 56009-40-6 | 0.043 |
| Methyl 3-hydroxytetradecanoate | 55682-83-2 | 0.043 |
| Methyl 14-methylpentadecanoate | 5129-60-2 | 0.043 |
| Methyl hexadecenoate (<i>cis</i> -9) | 1120-25-8 | 0.043 |
| Methyl hexadecanoate | 112-39-0 | 0.043 |
| Methyl 15-methylhexadecanoate | 6929-04-0 | 0.043 |
| Methyl <i>cis</i> -9,10-methylenehexadecanoate | 36254-90-7 | 0.043 |
| Methyl heptadecanoate | 1731-92-6 | 0.043 |
| Methyl 2-hydroxyhexadecanoate | 16742-51-1 | 0.043 |
| Methyl octadecadienote (all <i>cis</i> 9,12) | 112-63-0 | 0.043 |
| Methyl octadecenoate (<i>cis</i> -9) | 112-62-9 | 0.043 |
| Methyl octadecenoate (<i>trans</i> -9) | 1937-62-8 | 0.043 |
| Methyl octadecanoate | 112-61-8 | 0.043 |
| Methyl <i>cis</i> -9,10-methyleneoctadecanoate | 3971-54-8 | 0.043 |
| Methyl nonadecanoate | 1731-94-8 | 0.043 |
| Methyl eicosanoate | 1120-28-1 | 0.043 |

Section 4. First Aid Measures

Inhalation:

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Consult a physician.

Skin:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash or discard clothing and shoes before reuse.

Eyes:

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel.

Ingestion:

If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire Fighting Measures**Suitable extinguishing media:**

Use dry chemical, appropriate foam, or carbon dioxide; water spray.

Specific hazards arising from the chemical:

Extremely flammable in presence of open flames, sparks, and static discharge.

Special protective actions for fire fighters:

Evacuate area and fight fire from a safe distance. Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Special protective equipment for fire fighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Section 6. Accidental Release Measures**Personal precautions:**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate personal protective equipment.

Environmental precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewer. Inform the relevant authorities if the product has caused environmental pollution (sewer, waterways, soil or air).

Methods and Materials for containment and cleaning up:

Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Prevent entry into sewers, water sources, basements or confined spaces. Contain and collect spillage with non-combustible, absorbent material and place in container for disposal according to local regulations. Do not touch spilled material. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the SDS and with local authorities.

Section 7. Handling and Storage**Precautions for safe handling:**

Avoid contact with eyes, skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Store and use away from heat, sparks, open flame or any other ignition source. Keep sealed when not in use. Wear appropriate personal protective equipment.

Conditions for safe storage, including incompatibilities:

Recommended storage temperature: -20°C Store in a tightly closed container. Separate from oxidizing materials.

Section 8. Exposure Controls/Personal Protection

This product contains no substances with occupational exposure limit values.

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal Protective Equipment:**Respiratory protection:**

Use only in a well ventilated area. Wear an appropriate NIOSH/MSHA approved air-purifying respirator. If warranted, wear a positive pressure air-supplied respirator in situations where there may be potential for airborne exposure.

Hand protection:

Chemical-resistant, impervious gloves should be worn at all times when handling chemical products.

Recommended: Nitrile rubber

Eye protection:

Safety eyewear should be worn at all times to avoid exposure to liquid splashes, mists or dusts.

Recommended: Splash goggles

Skin protection:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. Recommended: Lab coat

Section 9. Physical and Chemical Properties

| | |
|---|---------------------------|
| Appearance: | Liquid |
| Odor: | No data available |
| Odor threshold: | No data available |
| PH: | No data available |
| Melting/Freezing point: | -71°C (-96°F) |
| Initial boiling point and boiling range: | 151°C (304°F) |
| Flash point: | 43°C (109.4°F) closed cup |
| Evaporation rate (Butyl acetate = 1): | No data available |
| Flammability (solid, gas): | No data available |
| Upper/Lower flammability or explosive limit: | No data available |
| Vapor pressure: | No data available |
| Vapor density (Air=1): | No data available |
| Relative density: | No data available |
| Solubility (ies): | Hexane, ethanol, methanol |
| Partition coefficient (n-octanol/water): | No data available |
| Auto-ignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Viscosity: | No data available |

Section 10. Stability and Reactivity

Reactivity:

Stable under recommended storage conditions.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reaction:

No data available

Conditions to avoid:

Avoid excessive heat for prolonged periods of time. Avoid all possible sources of ignition (spark or flame).

Incompatible materials:

Avoid strong oxidizing substances.

Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. Carbon oxides

Section 11. Toxicological Information

Acute toxicity:

Methyl caproate

LC50: Inhalation - mouse - 14,000 mg/m³ @ 2 hour exposure time

LD50: Oral - rat - > 5,000 mg/kg

LD50: Dermal- guinea pig – 5,000 mg/kg

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

Specific target organ toxicity - single exposure:

No data available

Specific target organ toxicity - repeated exposure:

No data available

Aspiration hazard:

No data available

Section 12. Ecological Information

Toxicity:

No ecological data available for this product.

Persistence and degradability:

No data available

Bioaccumulative potential:

No data available

Bioaccumulation:

No data available

Mobility in soil:

No data available

Other adverse effects:

No data available

Section 13. Disposal Consideration

Disposal methods:

Observe all federal, state, and local environmental regulations.

Contact a licensed professional waste disposal service to dispose of this material.

Section 14. Transportation Information

Transportation quantity: This item shipped as an excepted quantity.

DOT (US)

| | |
|---|---------------------------|
| UN Number: | 1993 |
| UN Proper shipping name: | FLAMMABLE LIQUIDS, N.O.S. |
| Transportation hazard class(es): | 3 |
| Packaging group (if applicable): | III |
| Environmental hazards: | No |
| Marine pollutant: | No |

Land Transport ADR/RID

| | |
|---|---------------------------|
| UN Number: | 1993 |
| UN Proper shipping name: | FLAMMABLE LIQUIDS, N.O.S. |
| Transportation hazard class(es): | 3 |
| Packaging group (if applicable): | III |
| Environmental hazards: | No |
| Marine pollutant: | No |

Maritime Transport IMDG

| | |
|---|---------------------------|
| UN Number: | 1993 |
| UN Proper shipping name: | FLAMMABLE LIQUIDS, N.O.S. |
| Transportation hazard class(es): | 3 |
| Packaging group (if applicable): | III |
| Environmental hazards: | No |
| Marine pollutant: | No |

Air Transport ICAO/IATA

| | |
|---|---------------------------|
| UN Number: | 1993 |
| UN Proper shipping name: | FLAMMABLE LIQUIDS, N.O.S. |
| Transportation hazard class(es): | 3 |
| Packaging group (if applicable): | III |
| Environmental hazards: | No |
| Marine pollutant: | No |

Section 15. Regulatory Information**DSL/NDSL status:**

This product contains the following components that are on the Canadian DSL list.

| Component | CAS Number |
|--|-------------------|
| Methyl caproate | 106-70-7 |
| Methyl dodecanoate | 111-82-0 |
| Methyl tetradecanoate | 124-10-7 |
| Methyl pentadecanoate | 7132-64-1 |
| Methyl hexadecanoate | 112-39-0 |
| Methyl octadecadienote (all <i>cis</i> 9,12) | 112-63-0 |
| Methyl octadecenoate (<i>cis</i> -9) | 112-62-9 |
| Methyl octadecenoate (<i>trans</i> -9) | 1937-62-8 |
| Methyl octadecanoate | 112-61-8 |

This product contains the following components that are on the Canadian NDSL list.

| Component | CAS Number |
|-----------------------|-------------------|
| Methyl undecanoate | 1731-86-8 |
| Methyl tridecanoate | 1731-88-0 |
| Methyl heptadecanoate | 1731-92-6 |
| Methyl eicosanoate | 1120-28-1 |

TSCA

This product contains the following components that are listed on the TSCA inventory.

| Component | CAS Number |
|--|-------------------|
| Methyl caproate | 106-70-7 |
| Methyl dodecanoate | 111-82-0 |
| Methyl tetradecanoate | 124-10-7 |
| Methyl pentadecanoate | 7132-64-1 |
| Methyl hexadecanoate | 112-39-0 |
| Methyl octadecadienote (all <i>cis</i> 9,12) | 112-63-0 |
| Methyl octadecenoate (<i>cis</i> -9) | 112-62-9 |
| Methyl octadecenoate (<i>trans</i> -9) | 1937-62-8 |
| Methyl octadecanoate | 112-61-8 |
| Methyl undecanoate | 1731-86-8 |
| Methyl tridecanoate | 1731-88-0 |
| Methyl heptadecanoate | 1731-92-6 |
| Methyl eicosanoate | 1120-28-1 |

SARA 302 Components:

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

SARA 313 Components:

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:

Fire hazard

New Jersey Right To Know Components:

| Component | CAS Number |
|------------------|-------------------|
| Methyl caproate | 106-70-7 |

Pennsylvania Right To Know Components:

| Component | CAS Number |
|------------------|-------------------|
| Methyl caproate | 106-70-7 |

California Prop. 65 Components:

This product does not contain any chemicals known to the State of California to cause cancer.

Section 16. Other Information

Manufacturer Supplementary Notes:

The statements contained herein are based upon technical data that MATREYA LLC believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. MATREYA LLC MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. MATREYA LLC ASSUMES NO LIABILITY FOR ANY USE OF THESE CHEMICALS BY THE END USER.

| | | |
|--------------------------|------------|---|
| Revision Summary: | 10/15/2012 | Version 1: New |
| | 03/11/2014 | Version 2: Revised product use statement. |
| | 03/30/2015 | Version 3: Changed company address. |