



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
2178 High Tech Road, State College, PA 16803
Tel: 800-342-3595/814-355-1030
Fax: 814-355-1031
Email: customerservice@matreya.com
Web: www.matreya.com

24 Hour Emergency Number: Chemtrec
800-424-9300 (within United States)

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.
	7/28/2017	Version 4: Removed Chemtrec International number.
	8/17/2018	Version 5: Reviewed, no changes.