

## 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 1 of 10

Version # 03 Print Date: 06-18-2020

1. IDENTIFICATION

Product Description: METHYL LACTATE

**CAS #** 547-64-8 **FEMA Number** N/A

Other means of identification

Vigon Item # 508059

Recommended use Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance

compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.

570-476-6300

Recommended restrictions For Manufacturing Use Only

Company 24 Hour Emergency Response Information

Vigon International, Inc. INFOTRAC (ACCT# 78928);

127 Airport Road 1-800-535-5053 WITHIN THE U.S.A.
E. Stroudsburg, PA 18301 1-352-323-3500 OUTSIDE THE U.S.A.

For information call: 570-476-6300

Web Site: www.vigon.com

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Vigon International, Inc.
Address 127 Airport Road

E. Stroudsburg, PA 18301

**United States** 

**Telephone** For information call:

Website www.vigon.com

E-mail regulatory@vigon.com

Emergency phone number INFOTRAC (ACCT# 78928);

1-800-535-5053 WITHIN THE U.S.A. 1-352-323-3500 OUTSIDE THE U.S.A.

2. HAZARD(S) IDENTIFICATION

Physical hazardsFlammable liquidsCategory 3Health hazardsSerious eye damage/eye irritationCategory 2A

Specific target organ toxicity, single Category 3 respiratory tract irritation

exposure

Environmental hazards Not classified.

Label elements



Signal word Warning

**Hazard statement** Flammable liquid and vapor. Causes serious eye irritation. May cause respiratory irritation.



## 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 2 of 10

Version # 03 Print Date: 06-18-2020

Precautionary statement

**Prevention** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to

prevent static discharges. Wash thoroughly after handling. Use only outdoors or in a

well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF

INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. If eye irritation persists: Get

medical advice/attention. In case of fire: Use appropriate media to extinguish.

Storage Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information 100% of the substance consists of component(s) of unknown acute oral toxicity. 100% of the

substance consists of component(s) of unknown acute dermal toxicity. 100% of the substance consists of component(s) of unknown acute inhalation toxicity. 100% of the substance consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the substance

consists of component(s) of unknown long-term hazards to the aquatic environment.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Substances**

Chemical name	Common name and synonyms	CAS number	%
METHYL LACTATE	2- hydroxy-propionic acid methyl ester methyl 2-hydroxypropanoate methyl DL-lactate propanoic acid, 2-hydroxy-, methyl ester, (+/-)-	547-64-8	100

#### 4. FIRST-AID MEASURES

**Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or

persist.

Skin contact Take off immediately all contaminated clothing. Get medical attention if irritation develops and

persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and

persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if

the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low

so that stomach vomit doesn't enter the lungs.

Most important

symptoms/effects, acute and

delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. May cause respiratory irritation.



## 508059 METHYL LACTATE

Page 3 of 10 Revision Date: 06-18-2020

Print Date: 06-18-2020 Version # 03

Indication of immediate medical attention and special treatment

needed

General information

Not available.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Unsuitable extinguishing media Specific hazards arising from

the chemical

Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Do not use a solid water stream as it may scatter and spread fire.

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods Use water spray to cool unopened containers.

General fire hazards Static charges generated by emptying package in or near flammable vapor may cause flash fire.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Collect and dispose of spillage as indicated in section 13 of the SDS.

Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions** 

Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.



## 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 4 of 10

Version # 03 Print Date: 06-18-2020

7. HANDLING AND STORAGE

**Precautions for safe handling**Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary

measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged

exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep container closed. Handle containers with care. Open slowly in order to control possible

pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits This substance has no PEL, TLV, or other recommended exposure limit.

Biological limit values No biological exposure limits noted for the ingredient(s).

Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Chemical resistant gloves.

Other Not available.

Respiratory protection Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must

be provided.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Always observe good personal hygiene measures, such as washing

after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Refer to Spec Sheet

Physical state Liquid.
Form Liquid.

Color Refer to Spec Sheet

Odor Characteristic.
Odor threshold Not available.
pH Not available.
Melting point/freezing point -86.8 °F (-66 °C)

Initial boiling point and boiling

291.2 - 293 °F (144 - 145 °C)

range

Flash point 121.0 °F (49.4 °C) Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

(%)



# 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 5 of 10

Version # 03 Print Date: 06-18-2020

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.24 kPa (77 °F (25 °C))

Vapor density 3.6

Relative density Not available.

Solubility(ies)

Solubility (water) Soluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 725 °F (385 °C)

Decomposition temperature Not available.

Viscosity Not available.

Other information

**Density** 1.09 g/cm3 estimated at 19 °C **Dynamic viscosity** 2.94 mPa.s (68 °F (20 °C))

**Explosive properties** Not explosive.

Kinematic viscosity 2.697 mm²/s estimated

Molecular formulaC4-H8-O3Molecular weight104.1 g/molOxidizing propertiesNot oxidizing.Specific gravity1.09 at 19 °C

#### 10. STABILITY AND REACTIVITY

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

Hazardous decomposition No hazardous decomposition products if stored and handled as indicated.

products

#### 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

InhalationMay cause irritation to the respiratory system.Skin contactKnowledge about health hazard is incomplete.

**Eye contact** Causes serious eye irritation.

**Ingestion** Knowledge about health hazard is incomplete.



## 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 6 of 10

Version # 03 Print Date: 06-18-2020

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization

Skin sensitization

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible.

Carcinogenicity

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

**Reproductive toxicity**Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product Species Test Results

METHYL LACTATE (CAS 547-64-8)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) > 663 - < 847 mg/l, 48 hours

Persistence and degradability No data is available on the degradability of this substance.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.



## 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 7 of 10

Version # 03 Print Date: 06-18-2020

#### 13. DISPOSAL CONSIDERATIONS

**Disposal instructions**Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain

into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or

used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

**Local disposal regulations**Dispose in accordance with all applicable regulations.

Hazardous waste code Not established.

Waste from residues / unused

products

Empty containers or liners may retain some product residues. This material and its container must

be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

#### 14. TRANSPORT INFORMATION

#### **ADN**

UN number 3272

**UN proper shipping name** ESTERS, N.O.S. (METHYL LACTATE)

Transport hazard class(es) 3
Subsidiary class(es) Packing group III
Environmental hazards No
Labels required 3

**ADR** 

UN number 3272

UN proper shipping name ESTERS, N.O.S. (METHYL LACTATE)

Transport hazard class(es) 3
Subsidiary class(es) Packing group III
Environmental hazards No
Labels required 3

RID

UN number 3272

UN proper shipping name ESTERS, N.O.S. (METHYL LACTATE)

Transport hazard class(es) 3
Subsidiary class(es) Packing Group III
Environmental Hazards No
Labels required 3

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

DOT

**BULK** 

UN number 3272

Proper shipping name ESTERS, N.O.S. (METHYL LACTATE)

Hazard class 3
Packing group III



# 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 8 of 10

Version # 03 Print Date: 06-18-2020

**Environmental hazards** 

Marine pollutant No Labels required 3

DOT

**NON-BULK** 

Not regulated as dangerous goods.

**IATA** 

UN number 3272

UN proper shipping name ESTERS, N.O.S. (METHYL LACTATE)

Transport hazard class(es) 3
Subsidiary class(es) Packing group III
Environmental hazards No
Labels required 3

**IMDG** 

UN number 3272

UN proper shipping name ESTERS, N.O.S. (METHYL LACTATE)

Transport hazard class(es) 3
Subsidiary class(es) Packing group III

Environmental hazards

Marine pollutant No Labels required 3

Transport in bulk according

Not applicable.

to Annex II of MARPOL 73/78 and the IBC Code

ADN; ADR; DOT BULK; IATA; IMDG; RID



#### 15. REGULATORY INFORMATION

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)** 

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.



## 508059 METHYL LACTATE

Page 9 of 10 Revision Date: 06-18-2020

Print Date: 06-18-2020 Version #03

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Yes

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Classified hazard Flammable (gases, aerosols, liquids, or solids)

categories Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

#### OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date 09-13-2017 Revision date 06-18-2020

Version # 03

**HMIS®** ratings Health: 2

> Flammability: 2 Physical hazard: 0



# 508059 METHYL LACTATE

Revision Date: 06-18-2020 Page 10 of 10

Version # 03 Print Date: 06-18-2020

#### Disclaimer

Vigon International, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.