SECTION 1: Identification

1.1. Identification

Product form: Substance
Substance name: Methyl Acetate
CAS No: 79-20-9
Formula: C₅H₁₀O₂
Synonyms: acetate of methyl / acetic acid methyl ester / acetic acid, methyl ester / devoton / ethyl ester of monoacetil acid / Methyl acetate / methyl acetate, anhydrous / methyl acetic ester / methyl ester acetic acid / methyl ethanoate / tereton

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Solvent
Industrial use: component

1.3. Details of the supplier of the safety data sheet

Ecolink Inc.
2177 Flintstone Drive Suite A
Tucker, GA 30084
770-621-8240 (t)

1.4. Emergency telephone number

Emergency number: INFOTRAC (800)-535-5053

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Flam. Liq. 2 H225 - Highly flammable liquid and vapor
Eye Irrit. 2A H319 - Causes serious eye irritation
STOT SE 3 H335 - May cause respiratory irritation
STOT SE 3 H336 - May cause drowsiness or dizziness

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US): GHS02 GHS07

Signal word (GHS-US): Danger

Hazard statements (GHS-US): H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US): P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Gound/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves, eye protection, face protection
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
## 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Acetate (Main constituent)</td>
<td>(CAS No) 79-20-9</td>
<td>100</td>
<td>Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336 STOT SE 3, H335</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- **First-aid measures after inhalation**: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- **First-aid measures after skin contact**: Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- **First-aid measures after eye contact**: Rinse immediately with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.
- **First-aid measures after ingestion**: Seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

#### Symptoms/injuries
- May cause drowsiness or dizziness.

#### Symptoms/injuries after inhalation

#### Symptoms/injuries after skin contact
- On continuous exposure/contact: Dry skin. Cracking of the skin.

#### Symptoms/injuries after eye contact
- Irritation of the eye tissue. Laceration.

#### Symptoms/injuries after ingestion

#### Chronic symptoms

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- **Suitable extinguishing media**: Preferably; alcohol resistant foam. Water spray. Polymer foam. BC powder. Carbon dioxide.
- **Unsuitable extinguishing media**: Solid water jet ineffective as extinguishing medium.

### 5.2. Special hazards arising from the substance or mixture

- **Fire hazard**: Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations.
### Methyl Acetate

#### Explosion hazard
- DIRECT EXPLOSION HAZARD. Gas/vapor explosive with air within explosion limits.
- INDIRECT EXPLOSION HAZARD. May be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".

#### Reactivity
- Decomposes slowly on exposure to water (moisture): release of toxic/corrosive/combustible gases/vapors (methanol, acetic acid vapors). Upon combustion: CO and CO2 are formed. Reacts violently with many compounds e.g. (some) acids/bases and (strong) oxidizers: (increased) risk of fire/explosion.

### 5.3. Advice for firefighters

#### Firefighting instructions
- Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool.

#### Protection during firefighting
- Self contained breathing apparatus and full protective clothing must be worn in case of fire.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**
- **Protective equipment**: Wear appropriate personal protective equipment.

**For emergency responders**
- **Protective equipment**: Do not attempt to take action without suitable protective equipment. For further information refer to section 8 Exposure controls/personal protection"."

### 6.2. Environmental precautions
- Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

**For containment / Methods for cleaning up**: Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Use water spray to disperse vapors and dilute spill to a nonflammable mixture. Prevent runoff form entering drains, sewers, or streams. Dike for later disposal.

**Other information**: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### 6.4. Reference to other sections
- For further information refer to section 8 : Exposure-controls/personal protection"".

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling
- **Precautions for safe handling**: Avoid breathing mists or vapors. Avoid contact with eyes and prolonged or repeated contact with skin. Use only with adequate ventilation. Wash thoroughly after handling.
- **Hygiene measures**: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities
- **Technical measures**: Ground/bond container and receiving equipment.
- **Storage conditions**: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
- **Heat-ignition**: KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
- **Prohibitions on mixed storage**: KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases. highly flammable materials. water/moisture.
- **Storage area**: Store in a dry area. Ventilation at floor level. Fireproof storeroom. Provide for a tub to collect spills. Provide the tank with earthing. Unauthorized persons are not admitted. Aboveground. Detached building. Store only in a limited quantity. May be stored under nitrogen. Meet the legal requirements.
- **Packaging materials**: SUITABLE MATERIAL: steel. aluminium. iron. glass. MATERIAL TO AVOID: copper. synthetic material.
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Methyl Acetate (79-20-9)</th>
<th>ACGIH</th>
<th>ACGIH TWA (ppm)</th>
<th>200 ppm (Methyl acetate; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td></td>
<td>ACGIH STEL (ppm)</td>
<td>250 ppm (Methyl acetate; USA; Short time value; TLV - Adopted Value)</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Hand protection: It is a good industrial hygiene practice to minimize skin contact. For operations where prolonged or repeated skin contact may occur, chemical-resistant gloves should be worn. Contact health and safety professional or manufacturer for specific information.

Eye protection: Wear safety glasses with side shields (or goggles).

Skin and body protection: Protective clothing.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Fruity odour</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>4.6 ppm</td>
</tr>
<tr>
<td>pH</td>
<td>Neutral</td>
</tr>
<tr>
<td>Freezing/ Melting point</td>
<td>-98 °C / -144.58 °F</td>
</tr>
<tr>
<td>Boiling point</td>
<td>55.8 – 58.2 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>-15.6 °C</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>11.8</td>
</tr>
<tr>
<td>Relative evaporation rate (ether=1)</td>
<td>2.2</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>3.1 - 16 vol %</td>
</tr>
<tr>
<td></td>
<td>95 - 500 g/m³</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>179.5 mmHg (20 °C)</td>
</tr>
<tr>
<td>Vapor pressure at 50 °C</td>
<td>782 hPa (50 °C)</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.93</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>2.6</td>
</tr>
<tr>
<td>Relative density of saturated gas/air mixture</td>
<td>1.34</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>933 kg/m³</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>74.08 g/mol</td>
</tr>
</tbody>
</table>
Solubility


Log Pow

0.37 (Calculated; KOWWIN; 25 °C)

Auto-ignition temperature

454 °C

Decomposition temperature

No data available

Viscosity

No data available

Viscosity, kinematic

No data available

Viscosity, dynamic

0.00038 Pa.s (20 °C; 0.000364 Pa.s; 25 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

None known

10.2. Chemical stability

Stable at room temperature and under normal conditions.

10.3. Possibility of hazardous reactions

Vapors can form explosive mixtures with air.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, No sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Not classified

Methyl Acetate (79-20-9)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral</td>
<td>6970 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 6482 mg/kg bodyweight; Rat; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2000 mg/kg (Rat; Literature study; OECD 402: Acute Dermal Toxicity; &gt;2000 mg/kg bodyweight; Rat; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 5000 mg/kg (Rabbit; Literature study)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 20 mg/l/4h (Rat; Literature study)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>6970.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

Not classified

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified
**Methyl Acetate**

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Reproductive toxicity</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>May cause drowsiness or dizziness. May cause respiratory irritation.</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Symptoms/injuries after skin contact</td>
<td>ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.</td>
</tr>
<tr>
<td>Symptoms/injuries after eye contact</td>
<td>Irritation of the eye tissue.</td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

### 12.1. Toxicity

**Ecology - general**

Classification concerning the environment: not applicable.

**Ecology - water**

Ground water pollutant. Slightly harmful to fishes (LC50(96h) 100-1000 mg/l). Not harmful to invertebrates (Daphnia) (EC50 (48h) > 1000 mg/l). Slightly harmful to algae (EC50 (72h) > 100 mg/l). Not harmful to bacteria.

### 12.2. Persistence and degradability

**Methyl Acetate (79-20-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>250 - 350 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Brachydanio rerio; Static system; Fresh water; Experimental value)</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>1026.7 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilization Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)</td>
</tr>
<tr>
<td>Threshold limit algae 2</td>
<td>&gt; 120 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Scenedesmus subspicatus; Static system; Fresh water; Experimental value)</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

**Methyl Acetate (79-20-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>&lt; 1 (BCF)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>0.37 (Calculated; KOWWIN; 25 °C)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Low potential for bioaccumulation (BCF &lt; 500).</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

**Methyl Acetate (79-20-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>0.024 N/m (20 °C)</td>
</tr>
<tr>
<td>Log Koc</td>
<td>log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC); 0.18; Experimental value; GLP</td>
</tr>
</tbody>
</table>

### 12.5. Other adverse effects

No additional information available.
SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Do not discharge into surface water.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Transport document description : UN1231 Methyl acetate, 3, II
UN-No.(DOT) : UN1231
Proper Shipping Name (DOT) : Methyl acetate
Hazard labels (DOT) : 3 - Flammable liquid

Packing group (DOT) : II - Medium Danger
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal............ 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
DOT Vessel Stowage Location : B - (i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

Other information : No supplementary information available.

TDG
No additional information available

Transport by sea
UN-No. (IMDG) : 1231
Class (IMDG) : 3 - Flammable liquids
EmS-No. (1) : F-E
EmS-No. (2) : S-D

Air transport
UN-No. (IATA) : 1231
Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : II - Medium Danger
SECTION 15: Regulatory information

15.1. US Federal regulations

**Methyl Acetate (79-20-9)**

<table>
<thead>
<tr>
<th>EPA TSCA Regulatory Flag</th>
<th>T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.</th>
</tr>
</thead>
</table>

15.2. International regulations

**CANADA**
No additional information available

**EU-Regulations**
No additional information available

**National regulations**
No additional information available

15.3. US State regulations

**Methyl Acetate (79-20-9)**

<table>
<thead>
<tr>
<th>State or local regulations</th>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
</tr>
</thead>
</table>

SECTION 16: Other information

Revision date: 01/04/2016

Full text of H-phrases:

- **Eye Irrit. 2A** | Serious eye damage/eye irritation Category 2A
- **Flam. Liq. 2** | Flammable liquids Category 2
- **STOT SE 3** | Specific target organ toxicity (single exposure) Category 3
- **STOT SE 3** | Specific target organ toxicity (single exposure) Category 3
- **H225** | Highly flammable liquid and vapor
- **H319** | Causes serious eye irritation
- **H335** | May cause respiratory irritation
- **H366** | May cause drowsiness or dizziness

**NFPA health hazard**: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

**NFPA fire hazard**: 3 - Liquids and solids that can be ignited under almost all ambient conditions.

**NFPA reactivity**: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

SDS US (GHS HazCom 2012)

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ECOLINK INC. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if ECOLINK has been advised of the possibility of such damages. The vendor assumes no responsibility for injury or damages resulting from the inappropriate alteration or manipulation of this SDS and its contents from that originally submitted by ECOLINK INC.