MATERIAL SAFETY DATA SHEET

Methyl Acetate
This MSDS is valid for all grades and catalog #’s

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: High Purity Chemicals
Synonyms: methyl ethanoate; acetic acid methyl ester; Tereton
Other means of identification: CAS No. 79-20-9
EINECS No. 201-185-2

Recommended use of the chemical and restrictions on use:
General purpose solvent commonly used as a component of nail polish removers and glue.

Supplier Details:
Pharmco Products, Inc.
58 Vale Road, Brookfield,
CT 06804, USA.
Tel: 203.740.3471
Fax: 203.740.3481
CCN17213

Pharmco Products, Inc.
1101 Isaac Shelby Drive, Shelbyville,
KY 40065, USA.
Tel: 502.232.7600
Fax: 502.633.6100
CCN17213

Emergency Contact: CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

2. HAZARDS IDENTIFICATION

OSHA Hazards:
Flammable liquid, Irritant, Target organ effect

Target Organs:
Central nervous system, Eyes, Kidney

NFPA
GHS label elements, including precautionary statements

Signal Word:
DANGER!

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H316 Causes mild skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P261 Avoid breathing dust/fumes/gas/mist/vapors.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

GHS Classification(s)

Eye irritation (Category 2A)
Flammable Liquids (Category 2)
Skin irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

Other hazards which do not result in classification:

Potential Health Effects:

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Can be harmful if ingested.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Can be harmful, causing respiratory tract irritation, if inhaled. Vapors can cause drowsiness and dizziness.</td>
</tr>
<tr>
<td>Skin</td>
<td>Can cause irritation if absorbed through skin. Prolonged or repeated exposure can lead to localized skin dryness.</td>
</tr>
</tbody>
</table>

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3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical identity: Methyl Acetate
Common name / Synonym: Methyl ethanoate; acetic acid methyl ester; ethanoic acid methyl ester; Tereton
CAS number: 79-20-9
EINECS number: 201-185-2
ICSC number: 0507
RTECS #: AI9100000
UN #: 1231
EC #: 607-021-00-X

<table>
<thead>
<tr>
<th>% Weight</th>
<th>Material</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;97</td>
<td>Methyl Acetate</td>
<td>79-20-9</td>
</tr>
<tr>
<td>&lt;3</td>
<td>Methyl Alcohol</td>
<td>67-56-1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General advice
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin
Wash skin with soap and copious amounts of water. Seek medical attention.

Inhalation
Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):
Carbon oxides expected to be the primary hazardous combustion product.
Special protective equipment and precautions for firefighters:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

**Flammable Properties**

**Classification**
OSHA/NFPA Class IB Flammable Liquid.

**Flash point**
-10 °C (14 °F) - closed cup

**Autoignition temperature**
454 °C (850 °F)

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**
Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Environmental precautions:**
Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

**Methods and materials for containment and cleaning up:**
Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

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## 7. HANDLING AND STORAGE

**Precautions for safe handling:**
Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

**Conditions for safe storage, including any incompatibilities:**
Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid moisture.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control parameters, e.g., occupational exposure limit values or biological limit values:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
<th>Type</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Acetate</td>
<td>US (ACGIH)</td>
<td>TWA</td>
<td>200 ppm</td>
<td>ACGIH Threshold Limit Value</td>
</tr>
</tbody>
</table>

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Appropriate engineering controls:
General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Individual protection measures, such as personal protective equipment:

- **Respiratory protection:**
  Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

- **Hand protection:**
  Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

- **Eye protection:**
  Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

- **Skin and body protection:**
  Wear impervious, flame retardant, antistatic protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

- **Hygiene measures:**
  Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong> (physical state, color, etc.)</td>
<td>Liquid. Colorless, clear.</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Pleasant/Fruity</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Specific data not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Specific data not available</td>
</tr>
</tbody>
</table>
Freezing point | -99 °C (-146 °F)  
Initial boiling point and boiling range | 60 °C (140 °F)  
Flash point | -10 °C (14 °F) - closed cup  
Evaporation rate | Specific data not available  
Flammability (solid, gas) | Flammable  
Upper / Lower flammability or explosive limits | 16% (V) / 3.1% (V)  
Vapor pressure | 217 hPa (163 mmHg) at 20 °C (68 °F)  
Vapor Density | 2.8  
Relative Density | 0.934 g/cm³ at 25 °C (77 °F)  
Solubility(ies) | soluble  
Partition coefficient n-octanol/water(ies) | log Pow: 0.37  
Auto-ignition temperature | 454 °C (850 °F)  
Decomposition temperature | Specific data not available  
Formula (METHYL ACETATE) | C₃H₆O₂  
Molecular Weight (METHYL ACETATE) | 74.08 g/mol

10. STABILITY AND REACTIVITY

| Chemical Stability | Stable under recommended storage conditions.  
| Possibility of hazardous reactions | Vapors may form explosive mixture with air.  
| Conditions to avoid (e.g., static discharge, shock or vibration) | Heat, flames, and sparks. Extreme temperatures and direct sunlight.  
| Incompatible materials | Strong oxidizing agents  
| Hazardous decomposition products | Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products.

11. TOXICOLOGICAL INFORMATION

- Methyl Acetate 79-20-9

Product Summary:
No data available for the mutagenic, teratogenic, or reproductive effects of the product. No data available to designate product as an aspiration hazard or to cause specific target organ toxicity through repeated exposure.

Acute Toxicity:

| LD50 (Dermal) | Rabbit | >5,000 mg/kg  
| LD50 (Oral) | Rat | >5,000 mg/kg

Irritation:

- Eyes
  - Rabbit - moderate eye irritation

Respiratory or Skin Sensitization

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12. ECOLOGICAL INFORMATION

- Methyl Acetate 79-20-9

Ecotoxicity (aquatic and terrestrial, where available):

Ecotoxicity
No data available

Persistence and degradability:
No data available

Bioaccumulative potential:
13. DISPOSAL CONSIDERATIONS
Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:
Discharge, treatment, or disposal may be subject to national, state, or local laws. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

14. TRANSPORT INFORMATION
Description of waste residues and information on their safe handling and methods of disposal:

<table>
<thead>
<tr>
<th>UN number</th>
<th>1231</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Methyl acetate</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
</tr>
<tr>
<td>Packing group (if applicable)</td>
<td>II</td>
</tr>
</tbody>
</table>

IMDG
UN-Number: 1231 Class: 3 Packing Group: II
EMS-No: F-E, S-D
Proper shipping name: METHYL ACETATE
Marine pollutant: No

IATA
UN-Number: 1231 Class: 3 Packing Group: II
Proper shipping name: Methyl acetate

15. REGULATORY INFORMATION
Safety, health and environmental regulations specific for the product in question:
OSHA Hazards
Flammable liquid, Irritant, Target organ effect

All ingredients are on the following inventories or are exempted from listing

<table>
<thead>
<tr>
<th>Country</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>AICS</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
</tr>
</tbody>
</table>
Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)  
+1.703.527.3887 (INT)

<table>
<thead>
<tr>
<th>Country</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>IECS</td>
</tr>
<tr>
<td>European Union</td>
<td>EINECS</td>
</tr>
<tr>
<td>Japan</td>
<td>ENCS/ISHL</td>
</tr>
<tr>
<td>Korea</td>
<td>ECL</td>
</tr>
<tr>
<td>New Zealand</td>
<td>NZIoC</td>
</tr>
<tr>
<td>Philippines</td>
<td>PICCS</td>
</tr>
<tr>
<td>United States of America</td>
<td>TSCA</td>
</tr>
</tbody>
</table>

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

**SARA 313 Components**
The following components are subject to reporting levels established by SARA title III, Section 313: METHANOL (CAS# 67-56-1) Revision date 2007-07-01.

**SARA 311/312 Hazards**
- Acute Health Hazard
- Chronic Health Hazard
- Fire Hazard

**CERCLA**
Methanol CAS-No. 67-56-1. RQ: 5,000 lbs

**Massachusetts Right To Know Components**
Methanol CAS-No.67-56-1 Revision Date 2007-07-01
Methyl acetate CAS-No. 79-20-9 Revision Date 1993-04-24

**Pennsylvania Right To Know Components**
Methanol CAS-No.67-56-1 Revision Date 2007-07-01
Methyl acetate CAS-No. 79-20-9 Revision Date 1993-04-24

**New Jersey Right To Know Components**
Methanol CAS-No.67-56-1 Revision Date 2007-07-01
Methyl acetate CAS-No. 79-20-9 Revision Date 1993-04-24

**California Prop 65 Components**
WARNING! This product contains a chemical known to the State of California to cause birth defects or other

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16. OTHER INFORMATION: INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

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