1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name**  
TRIM® MicroSol® 585

**Material type**  
Nonchlorinated Semisynthetic Metalworking Fluid

**Classification/synonym(s)**  
Microemulsion/None

**Product use**  
Coolant and lubricant in metal removal process

**Manufacturer address**  
MASTER CHEMICAL CORPORATION  
501 West Boundary  
Perrysburg, OH 43551-1200  
419-874-7902

**Emergency telephone**  
800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>OTHER LIMITS RECOM.</th>
<th>CAS #</th>
<th>%RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severely hydrotreated petroleum oil (mist)</td>
<td>5mg/m³</td>
<td>5mg/m³</td>
<td>none</td>
<td>64742-52-5/64742-58-1/64742-65-0</td>
<td>30-40</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>none</td>
<td>5mg/m³</td>
<td>none</td>
<td>102-71-6</td>
<td>1-10</td>
</tr>
</tbody>
</table>

The exact chemical identities and percentages of the raw materials used in TRIM® MicroSol® 585 are trade secrets. This information is being withheld as provided for in the Occupational Safety and Health Administration's Hazard Communication Rule (29 CFR 1910.1200).

3. HAZARDS IDENTIFICATION

**Emergency overview**  
Yellow liquid  
No immediate hazard  
Fire may produce oxides of carbon and nitrogen

**POTENTIAL HEALTH EFFECTS**

**Acute effects of overexposure**  
Eye contact: Transient irritation  
Skin contact: Possible defatting, nonirritant, nonsensitizer  
Inhalation: Nontoxic  
Ingestion: Nontoxic

**Chronic effects of overexposure**  
None currently known

**Product/Ingredients listed as carcinogen or potential carcinogen?**  
NTP Annual Report: No  
IARC Monographs: No  
OSHA: No

**Signs and symptoms of exposure**  
None
Medical conditions generally aggravated by exposure

None known

4. FIRST AID MEASURES

Emergency and first aid procedures

<table>
<thead>
<tr>
<th>Condition</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Flush immediately with cool, clean water for at least 15 minutes</td>
</tr>
<tr>
<td>Skin</td>
<td>Wash with mild soap and warm water</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Move to fresh air</td>
</tr>
<tr>
<td>Ingestion</td>
<td>If large quantities are ingested, contact a physician</td>
</tr>
</tbody>
</table>

In every case get medical attention as required

5. FIRE FIGHTING MEASURES

Flash point (test method) Nonflammable (COC) Flammable limits Not determined

Extinguishing media As appropriate for the surrounding fire: water (flood with water), dry chemical, CO₂, or "alcohol" foam

Special fire fighting procedures None Unusual fire and explosion hazards None

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled

Mop up or use dry absorbent

7. HANDLING AND STORAGE

Precautions to be taken in handling and storing

Avoid contact with eyes. Avoid prolonged or repeated skin contact with the concentrate. Wash thoroughly after handling. Do not swallow. Refer to container labels.

Other precautions

This product contains amine. Do not add nitrite or other nitrosating agents to this product due to the potential for nitrosamine formation.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection (Specify type)

None

Ventilation

Local exhaust Not normally required
Mechanical (General) General room ventilation should be sufficient
Special None
Other None

Protective gloves

None

Other protective equipment

None

Eye protection

Safety glasses

Exposure limits

None established by ACGIH or OSHA for product as whole
Refer to Section 2
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Yellow liquid

Odor
Mild

pH of concentrate
9.5 – 9.7

Typical operating pH
9.0 – 9.6

Boiling point (ASTM D86)
208 °F (98 °C)

Freezing point
0 °F (-18 °C)

Solubility in water
Soluble

Specific gravity (H₂O=1)
0.988

V.O.C. Content (ASTM E1868-10)
163 g/l

Evaporation rate (butyl acetate=1)
0.01

10. STABILITY AND REACTIVITY

Stability
Stable

Conditions to avoid
None

Incompatibility
Strong acids and oxidizers

Hazardous combustion or decomposition products
Thermal decomposition (fire) may produce oxides of carbon and nitrogen
decomposition products

Hazardous polymerization
Will not occur

Conditions to avoid
None

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Study</th>
<th>Test Animal</th>
<th>Concentrate</th>
<th>10% Solution</th>
<th>Results of similar product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute inhalation toxicity</td>
<td>Rat</td>
<td>---</td>
<td>nontoxic</td>
<td>LC₅₀&gt;202 mg/l</td>
</tr>
<tr>
<td>*Acute oral toxicity</td>
<td>Rat</td>
<td>nontoxic</td>
<td>nontoxic</td>
<td>LD₅₀&gt;5000 mg/kg</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>Rabbit</td>
<td>nontoxic</td>
<td>nontoxic</td>
<td>LD₅₀&gt;2000 mg/kg</td>
</tr>
<tr>
<td>Primary skin irritation</td>
<td>Rabbit</td>
<td>irritant</td>
<td>nonirritant</td>
<td>PDI index=6.13</td>
</tr>
<tr>
<td>Primary eye irritation</td>
<td>Rabbit</td>
<td>irritant</td>
<td>nonirritant</td>
<td></td>
</tr>
<tr>
<td>*Repeated insult patch</td>
<td>Human</td>
<td>---</td>
<td>nonirritant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>volunteers</td>
<td></td>
<td>nonsensitizer</td>
<td></td>
</tr>
</tbody>
</table>

*results specifically for TRIM® MicroSol® 585

12. ECOLOGICAL INFORMATION

No data available

Page 3 of 4 (TRIM® MicroSol® 585)
13. DISPOSAL CONSIDERATIONS

Waste disposal method  Must comply with local, state, and federal regulations. If pre-treatment is needed, chemical treatment or ultrafiltration may be used. Contact Master Chemical Tech Line (1-800-537-3365) for assistance.

14. TRANSPORT INFORMATION

Department of Transportation  DOT Hazard Class: None

TRIM® MicoSol® 585 is not classified as a hazardous material by DOT.

15. REGULATORY INFORMATION

Resource Conservation and Recovery Act  EPA Hazardous Waste Number(s): None

TRIM® MicoSol® 585 is not classified as a hazardous waste by EPA.

Toxic Substances Control Act  All TRIM® MicroSol® 585 ingredients are listed on the TSCA Inventory of Chemical Substances.

Superfund Amendments and Reauthorization Act of 1986  TRIM® MicroSol® 585 does not contain any Section 302/304 Extremely Hazardous Substances or Section 313 Toxic Chemicals.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Hazard Index</th>
<th>NFPA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Concentrate) H = 1</td>
<td>H = 1</td>
</tr>
<tr>
<td>F = 0</td>
<td>F = 0</td>
</tr>
<tr>
<td>R = 0</td>
<td>R = 0</td>
</tr>
<tr>
<td>PP = A</td>
<td>Special hazards = none</td>
</tr>
<tr>
<td>(Typical Working Solution) H = 1</td>
<td>H = 1</td>
</tr>
<tr>
<td>F = 0</td>
<td>F = 0</td>
</tr>
<tr>
<td>R = 0</td>
<td>R = 0</td>
</tr>
<tr>
<td>PP = A</td>
<td>Special hazards = none</td>
</tr>
</tbody>
</table>

Key  0 = minimal  1 = slight  2 = moderate  3 = serious  4 = severe

This information is intended solely for the use of individuals trained in the particular system.

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