## 1. Identification

**Product identifier**

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Tergo Metal Cleaning Fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product number</strong></td>
<td>MCC-TMCFEUP, MCC-TMCFEUGL, MCC-TMCFEUGG, MCC-TMCFEUD, MCC-TMCFEUG, MCC-TMCFEUHGG</td>
</tr>
<tr>
<td><strong>Synonyms; trade names</strong></td>
<td>Prototype 10-122-2</td>
</tr>
</tbody>
</table>

**Recommended use of the chemical and restrictions on use**

- **Application**: Cleaning agent.

**Details of the supplier of the safety data sheet**

<table>
<thead>
<tr>
<th><strong>Supplier</strong></th>
<th>MICROCARE CORPORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturer</strong></td>
<td>MICROCARE CORPORATION</td>
</tr>
<tr>
<td></td>
<td>595 John Downey Drive</td>
</tr>
<tr>
<td></td>
<td>New Britain, CT 06051</td>
</tr>
<tr>
<td></td>
<td>United States of America</td>
</tr>
<tr>
<td></td>
<td>CAGE: OATV9</td>
</tr>
<tr>
<td></td>
<td>Tel: +1 800 638 0125, +1 860-827-0626</td>
</tr>
<tr>
<td></td>
<td>Fax: +1 860-827-8105</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:techsupport@microcare.com">techsupport@microcare.com</a></td>
</tr>
</tbody>
</table>

**Emergency telephone number**

| **Emergency telephone** | CHEMTREC 1-800-424-9300 (within the U.S.) |
| | +1 703-741-5970 (from anywhere in the world) |

## 2. Hazard(s) identification

**Classification of the substance or mixture**

<table>
<thead>
<tr>
<th><strong>Physical hazards</strong></th>
<th>Not Classified</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health hazards</strong></td>
<td>Acute Tox. 4 - H332</td>
</tr>
<tr>
<td><strong>Environmental hazards</strong></td>
<td>Aquatic Chronic 3 - H412</td>
</tr>
</tbody>
</table>

**Human health**

See Section 11 for additional information on health hazards. May be slightly irritating to eyes. Splashes in the eyes may cause redness and irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

**Physicochemical**

Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers.
Tergo Metal Cleaning Fluid

Pictogram

Signal word
Warning

Hazard statements
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P261 Avoid breathing vapor/spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P312 Call a poison center/doctor if you feel unwell.
P501 Dispose of contents/container in accordance with national regulations.

Supplemental label information
Safety data sheet available on request. For use in industrial installations only.

Contains
trans-DICHLOROETHYLENE

Other hazards
This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>trans-DICHLOROETHYLENE</th>
<th>60-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 156-60-5</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H332
Aquatic Chronic 3 - H412

<table>
<thead>
<tr>
<th>Proprietary A</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: Proprietary</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Aquatic Chronic 3 - H412

<table>
<thead>
<tr>
<th>Proprietary B</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: Proprietary</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Aquatic Chronic 4 - H413

The full text for all hazard statements is displayed in Section 16.

Composition comments
The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200 TSCA: The ingredients of this product are on the TSCA Inventory.
Tergo Metal Cleaning Fluid

4. First-aid measures

Description of first aid measures

General information: Never give anything by mouth to an unconscious person. Do not induce vomiting. Place unconscious person on the side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. Keep out of the reach of children.

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion: Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Consult a physician for specific advice.

Skin Contact: Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.

Eye Contact: Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Consult a physician for specific advice.

Most important symptoms and effects, both acute and delayed

General information: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Indication of immediate medical attention and special treatment needed

Notes for the doctor: No specific recommendations. If in doubt, get medical attention promptly.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Specific hazards: Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. Closed containers can burst violently when heated, due to excess pressure build-up.


Advice for firefighters

Protective actions during firefighting: Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions: Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level.

Environmental precautions: Contain spillage with sand, earth or other suitable non-combustible material. Avoid release to the environment.
Tergo Metal Cleaning Fluid

**Methods and material for containment and cleaning up**

**Methods for cleaning up** Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or watercourses or onto the ground. Contain and absorb spillage with sand, earth or other non-combustible material. Collect spillage with a shovel and broom, or similar and reuse, if possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Reference to other sections** See Section 11 for additional information on health hazards.

<table>
<thead>
<tr>
<th>7. Handling and storage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Precautions for safe handling</strong></td>
</tr>
<tr>
<td><strong>Usage precautions</strong> Provide adequate ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes.</td>
</tr>
<tr>
<td><strong>Conditions for safe storage, including any incompatibilities</strong></td>
</tr>
<tr>
<td><strong>Storage precautions</strong> Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep out of the reach of children.</td>
</tr>
<tr>
<td><strong>Specific end use(s)</strong> The identified uses for this product are detailed in Section 1.</td>
</tr>
<tr>
<td><strong>Reference to other sections</strong> Store away from incompatible materials (see Section 10).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Exposure Controls/personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control parameters</strong></td>
</tr>
<tr>
<td><strong>Occupational exposure limits</strong></td>
</tr>
<tr>
<td>trans-DICHLOROETHYLENE</td>
</tr>
<tr>
<td>Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 793 mg/m³</td>
</tr>
<tr>
<td>ACGIH = American Conference of Governmental Industrial Hygienists.</td>
</tr>
<tr>
<td><strong>Additional Occupational Exposure Limits</strong></td>
</tr>
<tr>
<td><strong>Ingredient comments</strong> ACGIH = US Standard. WEL = Workplace Exposure Limits</td>
</tr>
<tr>
<td><strong>Exposure controls</strong></td>
</tr>
<tr>
<td><strong>Protective equipment</strong></td>
</tr>
<tr>
<td><strong>Appropriate engineering controls</strong> No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.</td>
</tr>
<tr>
<td><strong>Eye/face protection</strong> Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.</td>
</tr>
<tr>
<td><strong>Hand protection</strong> Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.</td>
</tr>
<tr>
<td><strong>Other skin and body protection</strong> Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.</td>
</tr>
</tbody>
</table>
Tergo Metal Cleaning Fluid

Hygiene measures
No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. When using do not eat, drink or smoke.

Respiratory protection
Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Water-white</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight. Ether</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>The product is not flammable. Tag Closed Cup (ASTM D 56)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Explosive Limits: Lower explosive limit: 7 %(V) Upper explosive limit: 15.6 %(V)</td>
</tr>
<tr>
<td>Other flammability</td>
<td>No information available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.29</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Slightly soluble in water</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle size</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
</tr>
<tr>
<td>Saturation concentration</td>
<td>No information available</td>
</tr>
<tr>
<td>Critical temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Volatile organic compound</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability</td>
<td>The product is not flammable.</td>
</tr>
</tbody>
</table>

10. Stability and reactivity
Tergo Metal Cleaning Fluid

Reactivity
There are no known reactivity hazards associated with this product.

Stability
Stable at normal ambient temperatures and when used as recommended.

Possibility of hazardous reactions
Will not polymerize.

Conditions to avoid

Materials to avoid
Alkali metals. Alkaline earth metals. Powdered metal.

11. Toxicological information

Information on toxicological effects

Other health effects
There is no evidence that the product can cause cancer.

Acute toxicity - inhalation
ATE inhalation (vapours mg/l) 11.96

Inhalation
Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing. Headache. Dizziness.

Ingestion
Harmful if swallowed. Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain.

Skin Contact
Liquid may irritate skin.

Eye contact
Irritating to eyes.

Route of exposure
Skin and/or eye contact Ingestion. Inhalation

Target Organs
Eyes Respiratory system, lungs

Medical Symptoms
Product has a defatting effect on skin. May cause allergic contact eczema. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

Toxicological information on ingredients.

trans-DICHLOROETHYLENE

Other health effects
There is no evidence that the product can cause cancer.

Acute toxicity - inhalation
ATE inhalation (vapours mg/l) 11.0

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species
Rat

ATE oral (mg/kg) 5,000.0
Tergo Metal Cleaning Fluid

**Acute toxicity - dermal**

*Acute toxicity dermal (LD₅₀ mg/kg)*

5,000.0

*Species* Rat

*ATE dermal (mg/kg)*

5,000.0

**Acute toxicity - inhalation**

*Acute toxicity inhalation (LC₅₀ vapours mg/l)*

222.15

*Species* Rat

*ATE inhalation (vapours mg/l)*

222.15

**Skin corrosion/irritation**

*Animal data* Not irritating. Rabbit

*Human skin model test* Data lacking.

**Extreme pH** Not applicable. Not corrosive to skin.

**Serious eye damage/irritation**

*Serious eye damage/irritation* Not irritating. Rabbit

**Respiratory sensitization**

Data lacking.

**Skin sensitization**

Not sensitizing. - Guinea pig: Not sensitizing.

**Germ cell mutagenicity**

This substance has no evidence of mutagenic properties.

**Genotoxicity - in vitro**

This substance has no evidence of mutagenic properties.

**Carcinogenicity**

Does not contain any substances known to be carcinogenic.

**IARC carcinogenicity**

Not listed.

**NTP carcinogenicity**

Not listed.

**OSHA Carcinogenicity**

Not listed.

**Reproductive toxicity**

No evidence of reproductive toxicity in animal studies.

**Skin Contact**

Skin irritation should not occur when used as recommended. May cause defatting of the skin but is not an irritant.

**Eye contact**

May cause eye irritation.
Tergo Metal Cleaning Fluid

Acute and chronic health hazards

There is no evidence that the product can cause cancer.

12. Ecological Information

Ecotoxicity There are no data on the ecotoxicity of this product.

Ecological information on ingredients.

trans-DICHLOROETHYLENE

Ecotoxicity Low acute toxicity to aquatic organisms.

Toxicity No data available.

Ecological information on ingredients.

trans-DICHLOROETHYLENE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 1350 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 220 mg/l, Daphnia magna

Proprietary B

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >0.096 mg/l, Oryzias latipes (Red killifish)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: >0.157 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >0.000477 mg/l, Pseudokirchneriella subcapitata

Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

Proprietary B

Biodegradation Inherently biodegradable.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

trans-DICHLOROETHYLENE

Bio-Accumulative Potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

Proprietary B

Bio-Accumulative Potential BCF: 1990, Cyprinus carpio (Common carp)
Tergo Metal Cleaning Fluid

Partition coefficient  Pow: 4.9

Mobility in soil
Mobility  The product contains volatile substances which may spread in the atmosphere.

Ecological information on ingredients.
trans-DICHLOROETHYLENE
Mobility  The product has poor water-solubility.

Other adverse effects
Other adverse effects  The product contains a substance or substances that will contribute to global warming (greenhouse effect). The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

13. Disposal considerations

Waste treatment methods
General information  Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods  Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Waste class  No information available.

14. Transport information

General  Requirements for marking and labeling of package varies depending on mode of transport. If uncertain of proper markings and labeling, call MicroCare for assistance.
UN Number
UN No. (IMDG)  Not classified as dangerous for transport.
UN No. (DOT)  UN3082 (>2640 lbs), otherwise Not classified as hazardous.
UN proper shipping name
Proper shipping name (IMDG)  Not classified as dangerous for transport.
Proper shipping name (DOT)  DOT only - when shipped in packages with > 2640 lbs., use: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Dichloroethylene), 9, PGIII RQ (Dichloroethylene)
Transport hazard class(es)  Not applicable. No information required.
Transport labels  No transport warning sign required.
Packing group  No information required. Not applicable.
Environmental hazards
Environmentally Hazardous Substance  No.
15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

trans-DICHLOROETHYLENE
Final CERCLA RQ: 1000(454) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
Not listed.

SARA 313 Emission Reporting
Not listed.

CAA Accidental Release Prevention
Not listed.

SARA (311/312) Hazard Categories
None

OSHA Highly Hazardous Chemicals
Not listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
Not listed.

California Air Toxics "Hot Spots" (A-I)
Not listed.

California Air Toxics "Hot Spots" (A-II)
Not listed.

California Directors List of Hazardous Substances

trans-DICHLOROETHYLENE
Present.

Massachusetts "Right To Know" List

trans-DICHLOROETHYLENE
Present.

Pennsylvania "Right To Know" List

trans-DICHLOROETHYLENE
Present.

Inventories
Tergo Metal Cleaning Fluid

Canada - DSL/NDSL
Yes

US - TSCA
Yes

16. Other information

Revision comments
NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date
4/17/2018

Revision
61

Supersedes date
4/9/2018

SDS No.
BULK - TMCFEU

SDS status
Approved.

Hazard statements in full
H225 Highly flammable liquid and vapor.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.