SAFETY DATA SHEET
Tergo Metal Cleaning Fluid

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name Tergo Metal Cleaning Fluid
Product number MCC-TMCFEUP, MCC-TMCFEUGL, MCC-TMCFEUGG, MCC-TMCFEUD, MCC-TMCFEUG, MCC-TMCFEUHGG
Synonyms; trade names Prototype 10-122-2

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

1.3. Details of the supplier of the safety data sheet
Supplier MICROCare EUROPE BVBA
VEKESTRAAT 29 B11
INDUSTRIEZONE ‘T SAS
1910 KAMPENHOUT, Belgium
Phone +32.2.251.95.05
Fax +32.2.400.96.39

Manufacturer MICROCare CORPORATION
595 John Downey Drive
New Britain, CT 06051
United States of America
CAGE: OATV9
Tel: +1 800-638-0125, +1 860-827-0626
Fax: +1 860-827-8105
techsupport@microcare.com

1.4. Emergency telephone number
Emergency telephone CHEMTREC UK (London) +(44)-870-8200418 +1 703-741-5970 (from anywhere in the world)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards Not Classified
Health hazards Acute Tox. 4 - H332
Environmental hazards Aquatic Chronic 3 - H412

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

2.2. Label elements

Pictogram

![Exclamation Mark]

Signal word Warning

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

Precautionary statements P261 Avoid breathing vapour/ 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 CENTRE/doctor if you feel unwell.
P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information
EUH210 Safety data sheet available on request.
RCH001a For use in industrial installations only.

Contains trans-DICHLOROETHYLENE

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>trans-DICHLOROETHYLENE</td>
<td>60-100%</td>
</tr>
<tr>
<td>CAS number: 156-60-5</td>
<td></td>
</tr>
<tr>
<td>EC number: 205-860-2</td>
<td></td>
</tr>
<tr>
<td>REACH registration number: 05-2114285321-54-0000</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary A</td>
<td>1-5%</td>
</tr>
<tr>
<td>CAS number: Proprietary</td>
<td></td>
</tr>
<tr>
<td>EC number: Proprietary</td>
<td></td>
</tr>
<tr>
<td>REACH registration number: Proprietary</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Aquatic Chronic 3 - H412

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary B</td>
<td>1-5%</td>
</tr>
<tr>
<td>CAS number: Proprietary</td>
<td></td>
</tr>
<tr>
<td>EC number: Proprietary</td>
<td></td>
</tr>
<tr>
<td>REACH registration number: Proprietary</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Aquatic Chronic 3 - H412

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

Composition comments The data shown are in accordance with the latest EC Directives.
Tergo Metal Cleaning Fluid

SECTION 4: First aid measures

4.1. 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.

4.2. 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.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. 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 vapours. Closed containers can burst violently when heated, due to excess pressure build-up.

Hazardous combustion products
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Hydrogen chloride (HCl).

5.3. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up
Tergo Metal Cleaning Fluid

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.

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Usage precautions
Provide adequate ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities
Storage precautions
Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep out of the reach of children.

7.3. Specific end use(s)
Specific end use(s)
The identified uses for this product are detailed in Section 1.2.
Reference to other sections
Store away from incompatible materials (see Section 10).

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters
Occupational exposure limits
trans-DICHLOROETHYLENE
Long-term exposure limit (8-hour TWA): ACGIH
Short-term exposure limit (15-minute): ACGIH 200 ppm
ACGIH = American Conference of Governmental Industrial Hygienists.

Additional Occupational Exposure Limits

Ingredient comments
ACGIH = US Standard. WEL = Workplace Exposure Limits

8.2. Exposure controls
Protective equipment

Appropriate engineering controls
No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection
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.

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.
### Tergo Metal Cleaning Fluid

<table>
<thead>
<tr>
<th>Other skin and body protection</th>
<th>Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygiene measures</td>
<td>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.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Vapours 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.</td>
</tr>
</tbody>
</table>

#### SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Water-white.</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight. Ether.</td>
</tr>
<tr>
<td>Odour 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>Lower flammable/explosive limit: 7 %(V) Upper flammable/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>
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</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>
Tergo Metal Cleaning Fluid

UDF Phrase 1
The product is not flammable.

SECTION 10: Stability and reactivity

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

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

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Will not polymerise.

10.4. Conditions to avoid
Conditions to avoid
Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

10.5. Incompatible materials
Materials to avoid
Alkali metals. Alkaline earth metals. Powdered metal.

10.6. Hazardous decomposition products
Hazardous decomposition products

SECTION 11: Toxicological information

11.1. 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
Vapours 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 Skin

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.
# Tergo Metal Cleaning Fluid

**Proprietary B**

## Acute toxicity - oral

<table>
<thead>
<tr>
<th>Acute toxicity oral (LD₅₀ mg/kg)</th>
<th>5,000.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Species</strong></td>
<td>Rat</td>
</tr>
<tr>
<td><strong>ATE oral (mg/kg)</strong></td>
<td>5,000.0</td>
</tr>
</tbody>
</table>

## Acute toxicity - dermal

<table>
<thead>
<tr>
<th>Acute toxicity dermal (LD₅₀ mg/kg)</th>
<th>5,000.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Species</strong></td>
<td>Rat</td>
</tr>
<tr>
<td><strong>ATE dermal (mg/kg)</strong></td>
<td>5,000.0</td>
</tr>
</tbody>
</table>

## Acute toxicity - inhalation

<table>
<thead>
<tr>
<th>Acute toxicity inhalation (LC₅₀ vapours mg/l)</th>
<th>114.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Species</strong></td>
<td>Rat</td>
</tr>
<tr>
<td><strong>ATE inhalation (vapours mg/l)</strong></td>
<td>114.0</td>
</tr>
</tbody>
</table>

## Skin corrosion/irritation

<table>
<thead>
<tr>
<th>Animal data</th>
<th>Not irritating. Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human skin model test</strong></td>
<td>Data lacking.</td>
</tr>
<tr>
<td><strong>Extreme pH</strong></td>
<td>Not applicable. Not corrosive to skin.</td>
</tr>
</tbody>
</table>

## Serious eye damage/irritation

<table>
<thead>
<tr>
<th>Serious eye damage/irritation</th>
<th>Not irritating. Rabbit</th>
</tr>
</thead>
</table>

## Respiratory sensitisation

<table>
<thead>
<tr>
<th>Respiratory sensitisation</th>
<th>Data lacking.</th>
</tr>
</thead>
</table>

## Skin sensitisation

<table>
<thead>
<tr>
<th>Skin sensitisation</th>
<th>Not sensitising. - Guinea pig: Not sensitising.</th>
</tr>
</thead>
</table>

## Germ cell mutagenicity

<table>
<thead>
<tr>
<th>Genotoxicity - in vitro</th>
<th>This substance has no evidence of mutagenic properties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genotoxicity - in vivo</td>
<td>This substance has no evidence of mutagenic properties.</td>
</tr>
</tbody>
</table>

## Carcinogenicity

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>Does not contain any substances known to be carcinogenic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC carcinogenicity</td>
<td>Not listed.</td>
</tr>
</tbody>
</table>

## Reproductive toxicity

| Reproductive toxicity - fertility | No evidence of reproductive toxicity in animal studies. |
Tergo Metal Cleaning Fluid

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.

Acute and chronic health hazards
There is no evidence that the product can cause cancer.

SECTION 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.

12.1. Toxicity
Toxicity
No data available.

Ecological information on ingredients.

trans-DICHLOROETHYLENE

Acute aquatic toxicity
Acute toxicity - fish $\text{LC}_{50}$, 96 hours: 1350 mg/l, Fish
Acute toxicity - aquatic invertebrates $\text{EC}_{50}$, 48 hours: 220 mg/l, Daphnia magna

Proprietary B

Acute aquatic toxicity
Acute toxicity - fish $\text{LC}_{50}$, 96 hours: >0.096 mg/l, Oryzias latipes (Red killifish)
Acute toxicity - aquatic invertebrates $\text{LC}_{50}$, 48 hours: >0.157 mg/l, Daphnia magna
Acute toxicity - aquatic plants $\text{EC}_{50}$, 72 hours: >0.000477 mg/l, Pseudokirchneriella subcapitata

12.2. 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.

12.3. Bioaccumulative potential
Bioaccumulative potential
No data available on bioaccumulation.
Partition coefficient
No information available.

Ecological information on ingredients.
Tergo Metal Cleaning Fluid

Bioaccumulative potential

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

Proprietary B

Bioaccumulative potential

BCF: 1990, Cyprinus carpio (Common carp)

Partition coefficient

Pow: 4.9

12.4. 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.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

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

12.6. 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.

SECTION 13: Disposal considerations

13.1. 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

Aucune information disponible

SECTION 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.

14.1. UN number

UN No. (IMDG)

Not classified as dangerous for transport.

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

Not classified as dangerous for transport.

Proper shipping name (IMDG)

Not classified as dangerous for transport.

Proper shipping name (ADN)

Not classified as dangerous for transport.

14.3. Transport hazard class(es)

Not applicable. No information required.

Transport labels

No transport warning sign required.
Tergo Metal Cleaning Fluid

14.4. Packing group
No information required. Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information required.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

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

Revision date
09/04/2018

Revision
60

Supersedes date
09/04/2018

SDS number
BULK - TMCFEU

SDS status
Approved.

Hazard statements in full
H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

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.