SAFETY DATA SHEET
Tergo™ Chlorine-Free Cleaning Fluid - Boil

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

1.1. Product identifier
Product name: Tergo™ Chlorine-Free Cleaning Fluid - Boil
Product number: MCC-TCFCF01EUP
Synonyms; trade names: M2S-TCFCF01EUP

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Cleaning agent.
Uses advised against: No specific uses advised against are identified.

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
EuroSales@MicroCare.com

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 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336
Environmental hazards: Aquatic Chronic 3 - H412

2.2. Label elements
Pictogram:

![Pictogram Image]
Tergo™ Chlorine-Free Cleaning Fluid - Boil

Signal word
Danger

Hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P261 Avoid breathing vapour/spray.
P301+P330+P311 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

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

Contains
Proprietary Fluorocarbon, Proprietary A, Proprietary B, Proprietary C

Supplementary precautionary statements
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see medical advice on this label).
P330 Rinse mouth.
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Proprietary Fluorocarbon</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: Proprietary</td>
<td>EC number: Proprietary</td>
</tr>
</tbody>
</table>

Classification
Eye Irrit. 2 - H319
STOT SE 3 - H336
### Tergo™ Chlorine-Free Cleaning Fluid - Boil

<table>
<thead>
<tr>
<th>Proprietary A</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: Proprietary</td>
<td>EC number: Proprietary</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 - H302</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 - H312</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 3 - H412</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proprietary B</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: Proprietary</td>
<td>EC number: Proprietary</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 - H302</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 - H332</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proprietary C</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: Proprietary</td>
<td>EC number: Proprietary</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Skin Corr. 1C - H314</td>
<td></td>
</tr>
<tr>
<td>Eye Dam. 1 - H318</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethanol</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 64-17-5</td>
<td>EC number: 200-578-6</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Flam. Liq. 2 - H225</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>METHANOL</th>
<th>&lt;1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 67-56-1</td>
<td>EC number: 200-659-6</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Flam. Liq. 2 - H225</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 3 - H301</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 3 - H311</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 3 - H331</td>
<td></td>
</tr>
<tr>
<td>STOT SE 1 - H370</td>
<td></td>
</tr>
</tbody>
</table>

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.

**Ingredient notes**
Denaturants in Ethanol include Methanol, CAS# 67-56-1; MIBK, CAS# 108-10-1 and Ethyl acetate, CAS# 141-78-6

**Composition**

**SECTION 4: First aid measures**
Revision date: 22/03/2019  
Revision: 25  
Supersedes date: 20/11/2018

Tergo™ Chlorine-Free Cleaning Fluid - Boil

4.1. Description of first aid measures

General information
Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Ingestion
Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.

Skin contact
Rinse with water.

Eye contact
Rinse immediately with plenty of water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Protection of first aiders
First aid personnel should wear appropriate protective equipment during any rescue.

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.

Inhalation
A single exposure may cause the following adverse effects: Irritation of nose, throat and airway. Difficulty in breathing. Coughing. Vapours may cause headache, fatigue, dizziness and nausea. Central nervous system depression.

Ingestion
May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.

Skin contact
Redness. Irritating to skin.

Eye contact
Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

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

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up. This product is toxic.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

5.3. Advice for firefighters
Tergo™ Chlorine-Free Cleaning Fluid - Boil

<table>
<thead>
<tr>
<th>Protective actions during firefighting</th>
<th>Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special protective equipment for firefighters</td>
<td>Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.</td>
</tr>
</tbody>
</table>

**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>Personal precautions</th>
<th>Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection if ventilation is inadequate.</th>
</tr>
</thead>
</table>

6.2. Environmental precautions

<table>
<thead>
<tr>
<th>Environmental precautions</th>
<th>Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.</th>
</tr>
</thead>
</table>

6.3. Methods and material for containment and cleaning up

<table>
<thead>
<tr>
<th>Methods for cleaning up</th>
<th>Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.</th>
</tr>
</thead>
</table>

6.4. Reference to other sections

<table>
<thead>
<tr>
<th>Reference to other sections</th>
<th>For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.</th>
</tr>
</thead>
</table>

**SECTION 7: Handling and storage**

7.1. Precautions for safe handling

<table>
<thead>
<tr>
<th>Usage precautions</th>
<th>Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. May damage fertility. May damage the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice on general occupational hygiene</td>
<td>Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.</td>
</tr>
</tbody>
</table>

7.2. Conditions for safe storage, including any incompatibilities
Tergo™ Chlorine-Free Cleaning Fluid - Boil

Storage precautions
Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Storage class
Miscellaneous hazardous material storage.

7.3. Specific end use(s)
Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

Usage description
Cleaning agent.

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

<table>
<thead>
<tr>
<th>Proprietary B</th>
<th>Long-term exposure limit (8-hour TWA): 10 ppm 44.2 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³</td>
</tr>
<tr>
<td>METHANOL</td>
<td>Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³</td>
</tr>
</tbody>
</table>

Sk
WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

Additional Occupational Exposure Limits

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection
Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection
Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures
Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Tergo™ Chlorine-Free Cleaning Fluid - Boil

Respiratory protection
Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls
Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information available</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>297°C/567°F</td>
</tr>
<tr>
<td>Flash point</td>
<td>The product is not flammable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or</td>
<td>Not determined</td>
</tr>
<tr>
<td>explosive limits</td>
<td></td>
</tr>
<tr>
<td>Other flammability</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>0.0025 mm Hg @ 20°C</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No information available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.898 g/cc @ 25°C</td>
</tr>
<tr>
<td>Bulk density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not determined</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>Global Warming Potential</td>
<td></td>
</tr>
<tr>
<td>(GWP)</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information
**Tergo™ Chlorine-Free Cleaning Fluid - Boil**

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refractive index</td>
<td>No information available.</td>
</tr>
<tr>
<td>Particle size</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Volatility</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>
</tbody>
</table>

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity**

See the other subsections of this section for further details.

**10.2. Chemical stability**

**Stability**

Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions**

No potentially hazardous reactions known.

**10.4. Conditions to avoid**

**Conditions to avoid**

There are no known conditions that are likely to result in a hazardous situation.

**10.5. Incompatible materials**

**Materials to avoid**

No specific material or group of materials is likely to react with the product to produce a hazardous situation.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products**

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity - oral**

**Notes (oral LD₅₀)**

Acute Tox. 4 - H302 Harmful if swallowed.

**ATE oral (mg/kg)**

1,020.41

**Acute toxicity - dermal**

**Notes (dermal LD₅₀)**

Based on available data the classification criteria are not met.

**ATE dermal (mg/kg)**

2,588.24

**Acute toxicity - inhalation**

**Notes (inhalation LC₅₀)**

Based on available data the classification criteria are not met.

**ATE inhalation (vapours mg/l)**

275.0

**Skin corrosion/irritation**

**Animal data**

Irritating.

**Serious eye damage/irritation**

**Eye Dam. 1 - H318 Causes serious eye damage.**
Tergo™ Chlorine-Free Cleaning Fluid - Boil

Respiratory sensitisation
Based on available data the classification criteria are not met.

Skin sensitisation
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Based on available data the classification criteria are not met.

Carcinogenicity
Based on available data the classification criteria are not met.

IARC carcinogenicity
Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.

Reproductive toxicity
Reproductive toxicity - fertility
May damage fertility.

Reproductive toxicity - development
May damage the unborn child.

Specific target organ toxicity - single exposure
STOT - single exposure
STOT SE 3 - H335, H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Target organs
Respiratory system, lungs Central nervous system

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard
Based on available data the classification criteria are not met.

General information
Avoid contact during pregnancy/while nursing. May damage fertility. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
A single exposure may cause the following adverse effects: Irritation of nose, throat and airway. Difficulty in breathing. Coughing. Vapours may cause headache, fatigue, dizziness and nausea. Central nervous system depression.

Ingestion
May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.

Skin contact
Redness. Irritating to skin.

Eye contact
Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

Route of exposure
Ingestion Inhalation Skin and/or eye contact

Target organs
Central nervous system Respiratory system, lungs

Toxicological information on ingredients:

<table>
<thead>
<tr>
<th>Proprietary Fluorocarbon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute toxicity - oral</strong></td>
</tr>
<tr>
<td><strong>Acute toxicity oral (LD₅₀ mg/kg)</strong></td>
</tr>
<tr>
<td><strong>Species</strong></td>
</tr>
</tbody>
</table>
## Tergo™ Chlorine-Free Cleaning Fluid - Boil

### Notes (oral LD₅₀)
Based on available data the classification criteria are not met.

<table>
<thead>
<tr>
<th>ATE oral (mg/kg)</th>
<th>2,001.0</th>
</tr>
</thead>
</table>

### Acute toxicity - dermal

<table>
<thead>
<tr>
<th>Notes (dermal LD₅₀)</th>
<th>Based on available data the classification criteria are not met.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Acute toxicity inhalation (LC₅₀ vapours mg/l)</th>
<th>965.0</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Rat</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Notes (inhalation LC₅₀)</th>
<th>Based on available data the classification criteria are not met.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ATE inhalation (vapours mg/l)</th>
<th>965.0</th>
</tr>
</thead>
</table>

### Skin corrosion/irritation
Based on available data the classification criteria are not met.

### Animal data
Based on available data the classification criteria are not met.

### Serious eye damage/irritation

<table>
<thead>
<tr>
<th>Serious eye damage/irritation</th>
<th>Causes serious eye irritation.</th>
</tr>
</thead>
</table>

### Respiratory sensitisation
Based on available data the classification criteria are not met.

### Skin sensitisation
Based on available data the classification criteria are not met.

### Germ cell mutagenicity

### Genotoxicity - in vitro
Based on available data the classification criteria are not met.

### Carcinogenicity

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>Based on available data the classification criteria are not met.</th>
</tr>
</thead>
</table>

### IARC carcinogenicity
None of the ingredients are listed or exempt.

### Reproductive toxicity
Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

<table>
<thead>
<tr>
<th>STOT - single exposure</th>
<th>STOT SE 3 - H336 May cause drowsiness or dizziness.</th>
</tr>
</thead>
</table>

### Target organs
Central nervous system

### Specific target organ toxicity - repeated exposure

<table>
<thead>
<tr>
<th>STOT - repeated exposure</th>
<th>Not classified as a specific target organ toxicant after repeated exposure.</th>
</tr>
</thead>
</table>

### Aspiration hazard
Based on available data the classification criteria are not met.
Tergo™ Chlorine-Free Cleaning Fluid - Boil

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

Inhalation
A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.

Ingestion
No specific symptoms known.

Skin contact
No specific symptoms known.

Eye contact
Irritating to eyes.

Route of exposure
Ingestion Inhalation Skin and/or eye contact

Target organs
Central nervous system

Proprietary B

Acute toxicity - oral
ATE oral (mg/kg)
500.0

Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ vapours mg/l)
4.178

ATE inhalation (vapours mg/l)
4.178

METHANOL

Acute toxicity - oral
Notes (oral LD₅₀)
Acute Tox. 3 - H301 Toxic if swallowed.
ATE oral (mg/kg)
100.0

Acute toxicity - dermal
Notes (dermal LD₅₀)
Acute Tox. 3 - H311 Toxic in contact with skin.
ATE dermal (mg/kg)
300.0

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
Acute Tox. 3 - H331 Toxic if inhaled.
ATE inhalation (vapours mg/l)
3.0

ATE inhalation (dusts/mists mg/l)
0.5

Skin corrosion/irritation
Animal data
Based on available data the classification criteria are not met.

Serious eye damage/irritation
Serious eye damage/irritation
Based on available data the classification criteria are not met.

Respiratory sensitisation
Respiratory sensitisation
Based on available data the classification criteria are not met.
**Tergo™ Chlorine-Free Cleaning Fluid - Boil**

**Skin sensitisation**

Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

Based on available data the classification criteria are not met.

**Genotoxicity - in vitro**

Based on available data the classification criteria are not met.

**Carcinogenicity**

Based on available data the classification criteria are not met.

**IARC carcinogenicity**

None of the ingredients are listed or exempt.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity - fertility**

Based on available data the classification criteria are not met.

**Reproductive toxicity - development**

Based on available data the classification criteria are not met.

**Specific target organ toxicity - single exposure**

STOT - single exposure  STOT SE 1 - H370 Causes damage to organs.

**Specific target organ toxicity - repeated exposure**

STOT - repeated exposure  Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

Based on available data the classification criteria are not met.

**General information**

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

**Inhalation**

A single exposure may cause the following adverse effects: Drowsiness, dizziness, disorientation, vertigo. Unconsciousness. High concentrations may be fatal.

**Ingestion**

May cause stomach pain or vomiting. May cause severe internal injury.

**Skin contact**

A single exposure may cause the following adverse effects: Pain.

**Eye contact**

No specific symptoms known.

**Route of exposure**

Ingestion Inhalation Skin and/or eye contact

**Target organs**

No specific target organs known.

---

**SECTION 12: Ecological information**

**Ecological information on ingredients.**

- **Proprietary Fluorocarbon**

  Ecotoxicity  Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

- **METHANOL**

  Ecotoxicity  Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

**12.1. Toxicity**
Tergo™ Chlorine-Free Cleaning Fluid - Boil

Toxicity

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Proprietary Fluorocarbon

Toxicity

Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: >160 mg/l, Daphnia magna

Proprietary A

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 5.6 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 2.8 mg/l, Daphnia magna

METHANOL

Toxicity

Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: >100 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: >10000 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability

The degradability of the product is not known.

Ecological information on ingredients.

Proprietary Fluorocarbon

Persistence and degradability

The degradability of the product is not known.

METHANOL

Persistence and degradability

The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

No information available.

Ecological information on ingredients.

Proprietary Fluorocarbon

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

log Pow: 2.18

Proprietary A
Tergo™ Chlorine-Free Cleaning Fluid - Boil

Partition coefficient

No information available.

**Proprietary B**

Partition coefficient

log Pow: 1.05

**METHANOL**

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

: -0.77

**12.4. Mobility in soil**

Mobility

No data available.

**Ecological information on ingredients.**

**Proprietary Fluorocarbon**

Mobility

No data available.

**METHANOL**

Mobility

No data available.

**12.5. Results of PBT and vPvB assessment**

Results of PBT and vPvB assessment

No data available.

**12.6. Other adverse effects**

Other adverse effects

None known.

**Ecological information on ingredients.**

**Proprietary Fluorocarbon**

Other adverse effects

None known.

**METHANOL**

Other adverse effects

None known.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**General information**

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods**

Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.
Tergo™ Chlorine-Free Cleaning Fluid - Boil

SECTION 14: Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
No transport warning sign required.

14.4. Packing group
Not applicable.

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

14.6. Special precautions for user
Not applicable.

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
Not applicable.

SECTION 15: Regulatory information

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

National regulations
Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

EU legislation

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

Inventories

EU - EINECS/ELINCS
None of the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
Proprietary Fluorocarbon
Tergo™ Chlorine-Free Cleaning Fluid - Boil

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- CAS: Chemical Abstracts Service.
- ATE: Acute Toxicity Estimate.
- LC₅₀: Lethal Concentration to 50 % of a test population.
- LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
- EC₅₀: 50% of maximal Effective Concentration.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms

- Acute Tox. = Acute toxicity
- Eye Dam. = Serious eye damage
- Repr. = Reproductive toxicity
- Skin Irrit. = Skin irritation
- STOT SE = Specific target organ toxicity-single exposure
- Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Classification procedures according to Regulation (EC) 1272/2008

- Acute Tox. 4 - H302: Harmful if swallowed.
- H301: Toxic if swallowed.
- H311: Toxic in contact with skin.
- H312: Harmful in contact with skin.
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H331: Toxic if inhaled.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H370: Causes damage to organs.
- H412: Harmful to aquatic life with long lasting effects.

Training advice

Only trained personnel should use this material.

Revision date

22/03/2019

Revision

25

Supersedes date

20/11/2018

SDS number

BULK - TCFCF01EU

SDS status

Approved.

Hazard statements in full

- H225: Highly flammable liquid and vapour.
- H301: Toxic if swallowed.
- H302: Harmful if swallowed.
- H311: Toxic in contact with skin.
- H312: Harmful in contact with skin.
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H331: Toxic if inhaled.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H370: Causes damage to organs.
- H412: Harmful to aquatic life with long lasting effects.