SAFETY DATA SHEET
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

1. Identification

Product identifier
Product name PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK
Product number MCC-PROG, MCC-PROGG, MCC-PROL, MCC-PROLi, MCC-PROLG, MCC-PROP, MCC-PROPi, MCC-PROD, MCC-PROJG, MCC-PROGI
Synonyms; trade names PRO - PROCLEAN SOLVENT, BULK

Application Cleaning agent.

Details of the supplier of the safety data sheet
Supplier MICROCARE CORPORATION
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

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
OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.
Physical hazards Flam. Liq. 2 - H225
Health hazards Eye Irrit. 2A - H319 STOT SE 3 - H336
Environmental hazards Not Classified

Physicochemical The product is highly flammable. Vapors may form explosive mixtures with air. Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers.

Label elements
Pictogram

1/11
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

**Signal word**
Danger

**Hazard statements**
H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

**Precautionary statements**
P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing vapor/ spray.
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.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

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

**Contains**
PROPAN-2-OL

**Other hazards**
This substance is not classified as PBT or vPvB according to current EU criteria.

### 3. Composition/information on ingredients

#### Mixtures

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPAN-2-OL</td>
<td>30-60%</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>30-60%</td>
</tr>
</tbody>
</table>

**Classification**
- Flam. Liq. 2 - H225
- Eye Irrit. 2A - H319
- STOT SE 3 - H336

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

**Composition comments**
TSCA: The ingredients of this product are on the TSCA Inventory. 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.

**Composition**

### 4. First-aid measures

#### Description of first aid measures

**General information**
The product is flammable. CAUTION! First aid personnel must be aware of own risk during rescue! Move affected person to fresh air at once. Get medical attention if any discomfort continues.
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

Inhalation
Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention immediately.

Ingestion
Due to the physical nature of this material it is unlikely that swallowing will occur. Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Consult a physician for specific advice.

Skin Contact
Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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
Vapours may cause drowsiness and dizziness. Headache. Irritation of nose, throat and airway.

Ingestion
Due to the physical nature of this material it is unlikely that swallowing will occur. Ingestion of large amounts may cause unconsciousness. May cause nausea, headache, dizziness and intoxication.

Skin contact
Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. May cause skin irritation/eczema.

Eye contact
May cause temporary eye irritation. Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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
Extinguish with the following media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

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

Special hazards arising from the substance or mixture

Specific hazards
The product is flammable. Heating may generate flammable vapors.

Hazardous combustion products
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Oxides of carbon.

Advice for firefighters
Protective actions during firefighting
Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapors.

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
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

Personal precautions
Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation.

Environmental precautions
Avoid release to the environment. Do not discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material.

Methods and material for containment and cleaning up
Methods for cleaning up
Warn everybody of potential hazards and evacuate if necessary. If leakage cannot be stopped, evacuate area. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely.

Reference to other sections
For personal protection, see Section 8. See Section 11 for additional information on health hazards.

7. Handling and storage

Precautions for safe handling
Usage precautions
Do not eat, drink or smoke when using the product. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level.

Conditions for safe storage, including any incompatibilities
Storage precautions
Store in tightly-closed, original container in a dry, cool and well-ventilated place. Ground container and transfer equipment to eliminate sparks from static electricity. Keep container tightly closed. Keep away from heat, sparks and open flame.

Specific end uses(s)
Specific end use(s)
The identified uses for this product are detailed in Section 1.

Reference to other sections
Store away from incompatible materials (see Section 10).

8. Exposure Controls/personal protection

Control parameters
Occupational exposure limits
PROPN-2-OL
Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³
Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³
A4

ETHANOL
Short-term exposure limit (15-minute): ACGIH 1000 ppm 1880 mg/m³
A3

OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.
A4 = Not Classifiable as a Human Carcinogen.
### PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

<table>
<thead>
<tr>
<th>Additional Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredient comments</td>
</tr>
</tbody>
</table>

#### ETHANOL (CAS: 64-17-5)

| Ingredient comments                     | WEL = Workplace Exposure Limits |

#### Exposure controls

**Protective equipment**

**Appropriate engineering controls**

Provide adequate general and local exhaust ventilation. Avoid heat, flames and other sources of ignition.

**Eye/face protection**

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. 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.

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

**Other skin and body protection**

Wear apron or protective clothing in case of contact.

**Hygiene measures**

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

**Respiratory protection**

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

### 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>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcoholic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined. Not determined.</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>Initial boiling point and range</td>
<td>77°C/170.6°F @ 101.3 kPa</td>
</tr>
<tr>
<td>Flash point</td>
<td>12°C/54°F Tag closed cup.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available.</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>No information available.</td>
</tr>
</tbody>
</table>
# PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or</td>
<td>Lower flammable/explosive limit: 2.0 %(V)</td>
</tr>
<tr>
<td>explosive limits</td>
<td>Upper flammable/explosive limit: 12.7 %(V)</td>
</tr>
<tr>
<td>Other flammability</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>5.2 kPa @ 20°C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>1.82</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.79</td>
</tr>
<tr>
<td>Bulk density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>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>The product is highly flammable. Vapors may form explosive mixtures with air.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>There are no chemical groups present in the product that are associated with oxidizing properties.</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>Volatility</td>
<td>100%</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 flammable.</td>
</tr>
</tbody>
</table>

## 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>There are no known reactivity hazards associated with this product.</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable at normal ambient temperatures.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Will not polymerize.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Strong oxidizing agents. Strong alkalis. Strong mineral acids.</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Strong oxidizing agents.</td>
</tr>
</tbody>
</table>

## 11. Toxicological Information
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

Information on toxicological effects

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

Inhalation
May cause respiratory system irritation. Vapors may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion
Not considered to be a significant hazard due to the small quantities used.

Skin Contact
Product has a defatting effect on skin. May cause skin irritation/eczema.

Eye contact
Irritating to eyes. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

Acute and chronic health hazards
Keep out of the reach of children.

Toxicological information on ingredients.

**PROPAN-2-OL**

<table>
<thead>
<tr>
<th>Acute toxicity - inhalation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity inhalation (LC₅₀ vapours mg/l)</td>
<td>16,000.0</td>
</tr>
<tr>
<td>ATE inhalation (vapours mg/l)</td>
<td>16,000.0</td>
</tr>
</tbody>
</table>

Carcinogenicity

| IARC carcinogenicity | IARC Group 3   Not classifiable as to its carcinogenicity to humans. |
| NTP carcinogenicity   | Not listed. |
| OSHA Carcinogenicity  | Not listed. |

**ETHANOL**

<table>
<thead>
<tr>
<th>Acute toxicity - inhalation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity inhalation (LC₅₀ vapours mg/l)</td>
<td>20,000.0</td>
</tr>
<tr>
<td>ATE inhalation (vapours mg/l)</td>
<td>20,000.0</td>
</tr>
</tbody>
</table>

Carcinogenicity

| IARC carcinogenicity | IARC Group 1   Carcinogenic to humans. |

12. Ecological Information

Ecotoxicity
The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

Toxicity
Not considered toxic to fish.

Ecological information on Ingredients.

**PROPAN-2-OL**

Acute aquatic toxicity
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

Acute toxicity - fish  LC₅₀, 96 hours: 9,640 mg/l, Fish
Acute toxicity - aquatic invertebrates  EC₅₀, 48 hours: 5102 mg/l, Daphnia magna
Acute toxicity - aquatic plants  IC₅₀, 72 hours: >2,000 mg/l, Algae

ETHANOL

Acute aquatic toxicity
Acute toxicity - fish  LC₅₀, 96 hours: >10,000 mg/l, Fish
Acute toxicity - aquatic invertebrates  EC₅₀, 48 hours: 7,800 mg/l, Daphnia magna
Acute toxicity - aquatic plants  , 96 hours: 1000 mg/l, Freshwater algae

Persistence and degradability

The product is readily biodegradable.

Ecological information on ingredients.

ETHANOL

Persistence and degradability

The product is expected to be biodegradable.

Bioaccumulative potential

Bio-Accumulative Potential  No data available on bioaccumulation.
Partition coefficient  No information available.

Ecological information on ingredients.

PROPA-2-OL

Partition coefficient  : 0.05

ETHANOL

Bio-Accumulative Potential  Bioaccumulation is unlikely.
Partition coefficient  No information available.

Mobility in soil

Mobility  The product is soluble in water.

Ecological information on ingredients.

ETHANOL

Mobility  The product is soluble in water.

Other adverse effects

Other adverse effects  The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

13. Disposal considerations
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

Waste treatment methods

General information
Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids. Reuse or recycle products wherever possible.

Disposal methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport information

UN Number
UN No. (TDG) 1993
UN No. (IMDG) 1993
UN No. (ICAO) 1993
UN No. (DOT) UN1993

UN proper shipping name
Proper shipping name (TDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, PROPAN-2-OL)
Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, PROPAN-2-OL)
Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, PROPAN-2-OL)
Proper shipping name (DOT) FLAMMABLE LIQUIDS, N.O.S. (CONTAINS ETHANOL, PROPAN-2-OL)

Transport hazard class(es)
DOT hazard class 3
DOT hazard label 3
TDG class 3
TDG label(s) 3
IMDG Class 3
ICAO class/division 3

Transport labels

DOT transport labels

Packing group
TDG Packing Group II
IMDG packing group II
ICAO packing group II
DOT packing group II

Environmental hazards
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

Environmentally Hazardous Substance
No.

Special precautions for user
EmS F-E, S-E

Transport in bulk according to
Annex II of MARPOL 73/78
and the IBC Code
Not applicable.

15. Regulatory information

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

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
Not listed.

CAA Accidental Release Prevention
Not listed.

SARA (311/312) Hazard Categories
Acute
Fire

OSHA Highly Hazardous Chemicals
Not listed.

US State Regulations
California Air Toxics "Hot Spots" (A-I)
PROPA-2-OL
Present.

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

California Directors List of Hazardous Substances
PROPA-2-OL
Present.

Massachusetts "Right To Know" List
PROPA-2-OL
Present.
ETHANOL
Present.

Rhode Island "Right To Know" List
PROPA-2-OL
Present.
ETHANOL
Present.
PRO - ALCOHOL ENHANCED FLUX REMOVER-PROCLEAN, BULK

Minnesota "Right To Know" List

PROPAN-2-OL
Present.

ETHANOL
Present.

New Jersey "Right To Know" List

PROPAN-2-OL
Present.

ETHANOL
Present.

Pennsylvania "Right To Know" List

PROPAN-2-OL
Present.

ETHANOL
Present.

Inventories

Canada - DSL/NDSL
Yes

US - TSCA
Yes

<table>
<thead>
<tr>
<th>16. Other information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revision comments</strong></td>
</tr>
<tr>
<td><strong>Revision date</strong></td>
</tr>
<tr>
<td><strong>Revision</strong></td>
</tr>
<tr>
<td><strong>Supersedes date</strong></td>
</tr>
<tr>
<td><strong>SDS No.</strong></td>
</tr>
<tr>
<td><strong>SDS status</strong></td>
</tr>
<tr>
<td><strong>Hazard statements in full</strong></td>
</tr>
<tr>
<td>H225 Highly flammable liquid and vapor.</td>
</tr>
<tr>
<td>H319 Causes serious eye irritation.</td>
</tr>
<tr>
<td>H336 May cause drowsiness or dizziness.</td>
</tr>
</tbody>
</table>

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.