SAFETY DATA SHEET
Techni-Tool Flux Remover, AEROSOL

1. Identification

Product identifier
Product name Techni-Tool Flux Remover, AEROSOL
Product number 758CH752

Recommended use of the chemical and restrictions on use
Application Cleaning agent.

Details of the supplier of the safety data sheet
Manufacturer Techni-Tool, Inc.
1547 North Trooper Road
Worchester, PA  19490-1117
610-941-2400
610-940-5485
www.techni-tool.com

Emergency telephone number
Emergency telephone CHEMTREC (800) 424-9300

2. Hazard(s) identification

Classification of the substance or mixture
OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.
Health hazards Eye Irrit. 2A - H319 Repr. 2 - H361 STOT SE 1 - H370 STOT SE 3 - H335 STOT RE 1 - H372
Environmental hazards Not Classified

Human health Splashes in the eyes may cause redness and irritation. Keep out of the reach of children. See Section 11 for additional information on health hazards.

Label elements
Pictogram

Signal word Danger

Hazard statements H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to organs .
H372 Causes damage to organs through prolonged or repeated exposure.
Techni-Tool Flux Remover, AEROSOL

Precautionary statements
P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use
P261 Avoid breathing spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 Get medical advice/ attention if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P410+P403 Protect from sunlight. Store in a well-ventilated place.
P412 Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/ container in accordance with national regulations.

Contains
PROPA-2-OL, ETHANOL, ACETONE, METHANOL

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

3. Composition/Information on ingredients

Mixtures

PROPA-2-OL
CAS number: 67-63-0

<table>
<thead>
<tr>
<th>Classification</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2 - H225</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2A - H319</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
</tbody>
</table>

ETHANOL
CAS number: 64-17-5

<table>
<thead>
<tr>
<th>Classification</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2 - H225</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2A - H319</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
</tbody>
</table>

HFC-134a Tetrafluoroethane
CAS number: 811-97-2

<table>
<thead>
<tr>
<th>Classification</th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press. Gas, Liquefied</td>
<td></td>
</tr>
<tr>
<td>Liq. - H280</td>
<td></td>
</tr>
</tbody>
</table>

ACETONE
CAS number: 67-64-1

<table>
<thead>
<tr>
<th>Classification</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2 - H225</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2A - H319</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
</tbody>
</table>
Techni-Tool Flux Remover, AEROSOL

<table>
<thead>
<tr>
<th>METHANOL</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 67-56-1</td>
<td></td>
</tr>
</tbody>
</table>

**Classification**
- Flam. Liq. 2 - H225
- Acute Tox. 3 - H301
- Acute Tox. 3 - H311
- Acute Tox. 3 - H331
- Repr. 2 - H361
- STOT SE 1 - H370
- STOT RE 1 - H372

The Full Text for all Hazard Statements are 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.

**4. First-aid measures**

**Description of first aid measures**

**General information**
Promptly remove any clothing that becomes wet or contaminated. Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**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**
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**
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. 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**
Vapors may cause headache, fatigue, dizziness and nausea.

**Ingestion**
May cause stomach pain or vomiting. Headache.

**Skin contact**
Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

**Eye contact**
Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. Irritation and redness, followed by blurred vision.

**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**
Extinguish with the following media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.
## Techni-Tool Flux Remover, AEROSOL

**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 extremely flammable.

**Hazardous combustion products**

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

**Advice for firefighters**

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**

**Personal precautions**

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

**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**

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. Keep out of the reach of children.

**Specific end uses(s)**

Cleaning agent.

**Specific end use(s)**

Cleaning agent.

**Reference to other sections**

Store away from incompatible materials (see Section 10).

### 8. Exposure Controls/personal protection

**Control parameters**

**Occupational exposure limits**

PROPAN-2-OL
Techni-Tool Flux Remover, AEROSOL

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

ETHANOL

Long-term exposure limit (8-hour TWA): ACGIH
Short-term exposure limit (15-minute): ACGIH 1000 ppm

HFC-134a Tetrafluoroethane

Long-term exposure limit (8-hour TWA): OES  4240 mg/m³
Short-term exposure limit (15-minute): OES

ACETONE

Long-term exposure limit (8-hour TWA): ACGIH 250 ppm  594 mg/m³
Short-term exposure limit (15-minute): ACGIH 500 ppm  1187 mg/m³

METHANOL

Long-term exposure limit (8-hour TWA): OSHA 200 ppm  260 mg/m³
Short-term exposure limit (15-minute): ACGIH 250 ppm  328 mg/m³
Sk

OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
A4 = Not Classifiable as a Human Carcinogen.
Sk = Danger of cutaneous absorption.

Exposure controls

Protective equipment

Appropriate engineering controls

Provide adequate general and local exhaust 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.

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).

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor 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
## Techni-Tool Flux Remover, AEROSOL

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>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>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>Initial boiling point and range</td>
<td>77.6°C/172°F @ 101.3 kPa</td>
</tr>
<tr>
<td>Flash point</td>
<td>12°C/53°F TCC (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>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Upper flammable/explosive limit: 12.7 % (V) Lower flammable/explosive limit: 2.0 % (V)</td>
</tr>
<tr>
<td>Other flammability</td>
<td>The product is highly flammable.</td>
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<tr>
<td>Vapor pressure</td>
<td>5.2 kPa @ 20°C</td>
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<tr>
<td>Vapor density</td>
<td>1.82</td>
</tr>
<tr>
<td>Relative density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Completely 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>Oxidising 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>
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<tr>
<td>Molecular weight</td>
<td>No information available.</td>
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<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>
</tbody>
</table>

### 10. Stability and reactivity

| Stability          | Stable at normal ambient temperatures.          |
| Possibility of hazardous reactions | Will not polymerize.                            |
**Techni-Tool Flux Remover, AEROSOL**

**Conditions to avoid**  
Avoid heat, flames and other sources of ignition.

**Materials to avoid**  

**Hazardous decomposition products**  

### 11. Toxicological information

#### Information on toxicological effects

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

**Acute toxicity - oral**

<table>
<thead>
<tr>
<th>ATE oral (mg/kg)</th>
<th>6,666.67</th>
</tr>
</thead>
</table>

**Acute toxicity - dermal**

<table>
<thead>
<tr>
<th>ATE dermal (mg/kg)</th>
<th>20,000.0</th>
</tr>
</thead>
</table>

**Acute toxicity - inhalation**

<table>
<thead>
<tr>
<th>ATE inhalation (vapours mg/l)</th>
<th>200.0</th>
</tr>
</thead>
</table>

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

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

**Eye contact**  
Irritating to eyes.

### Toxicological information on ingredients

#### PROPAN-2-OL

**Carcinogenicity**

<table>
<thead>
<tr>
<th>IARC carcinogenicity</th>
<th>IARC Group 3  Not classifiable as to its carcinogenicity to humans.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTP carcinogenicity</td>
<td>Not listed.</td>
</tr>
<tr>
<td>OSHA Carcinogenicity</td>
<td>Not listed.</td>
</tr>
</tbody>
</table>

#### HFC-134a Tetrafluoroethane

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

**Acute toxicity - inhalation**

<table>
<thead>
<tr>
<th>Acute toxicity inhalation (LC₅₀ gases ppmV)</th>
<th>567,000.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
<td>Rat</td>
</tr>
<tr>
<td>ATE inhalation (gases ppm)</td>
<td>567,000.0</td>
</tr>
</tbody>
</table>

#### METHANOL

**Acute toxicity - oral**

<table>
<thead>
<tr>
<th>Acute toxicity oral (LD₅₀ mg/kg)</th>
<th>7,300.0</th>
</tr>
</thead>
</table>

Techni-Tool Flux Remover, AEROSOL

Species Mouse
ATE oral (mg/kg) 100.0
Acute toxicity - dermal
Acute toxicity dermal (LD₅₀ mg/kg) 15,800.0
Species Rabbit
ATE dermal (mg/kg) 300.0
Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ vapours mg/l) 64,000.0
Species Rat
ATE inhalation (vapours mg/l) 3.0

12. Ecological Information

Toxicity
Ecological information on ingredients.

PROPAN-2-OL
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 toxicity - fish LC₅₀, 96 hours: >10,000 mg/l, Fish
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 7,800 mg/l, Daphnia magna

HFC-134a Tetrafluoroethane
Acute toxicity - fish LC₅₀, 96 hours: 450 mg/l, Fish
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 980 mg/l, Daphnia magna

METHANOL
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

Bioaccumulative potential
Partition coefficient No information available.
Techni-Tool Flux Remover, AEROSOL

Ecological information on ingredients.

HFC-134a Tetrafluoroethane

Partition coefficient Pow: 1.06

Mobility in soil

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

13. Disposal considerations

Waste treatment methods

General information 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. (DOT) UN1950
UN No. (TDG) UN1950
UN No. (IMDG) UN1950
UN No. (ICAO) UN1950

UN proper shipping name
Proper shipping name (DOT) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY
Proper shipping name (TDG) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY
Proper shipping name (IMDG) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY
Proper shipping name (ICAO) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

Transport hazard class(es)
TDG class 2.1
TDG label 2.1
IMDG Class 2.1
ICAO class/division 2.1

Transport labels

Packing group
DOT pack group N/A
TDG Packing Group N/A
IMDG packing group N/A
ICAO packing group N/A

Environmental hazards
Techni-Tool Flux Remover, AEROSOL

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.

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

METHANOL
Final CERCLA RQ: 5000(2270) pounds (Kilograms)

ACETONE
Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
Not listed.

SARA 313 Emission Reporting

METHANOL
1.0 %

CAA Accidental Release Prevention
Not listed.

OSHA Highly Hazardous Chemicals
Not listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

METHANOL
Known to the State of California to cause developmental and reproductive toxicity.

California Air Toxics "Hot Spots" (A-I)

METHANOL
Present.

PROPAN-2-OL
Present.

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

California Directors List of Hazardous Substances
Techni-Tool Flux Remover, AEROSOL

METHANOL
Present.

ACETONE
Present.

PROPAN-2-OL
Present.

Massachusetts "Right To Know" List
ETHANOL
Yes.

METHANOL
Present.

ACETONE
Present.

PROPAN-2-OL
Present.

Rhode Island "Right To Know" List
ETHANOL
Yes.

METHANOL
Present.

ACETONE
Present.

PROPAN-2-OL
Present.

Minnesota "Right To Know" List
ETHANOL
Yes.

METHANOL
Present.

ACETONE
Present.

PROPAN-2-OL
Present.

HFC-134a Tetrafluoroethane
Present.

New Jersey "Right To Know" List
ETHANOL
Yes.
Techni-Tool Flux Remover, AEROSOL

METHANOL
Present.

ACETONE
Present.

PROPAN-2-OH
Present.

Pennsylvania "Right To Know" List

ETHANOL
Yes.

METHANOL
Present.

ACETONE
Present.

PROPAN-2-OH
Present.

Inventories

US - TSCA
Yes

ETHANOL
Yes

METHANOL
Present.

ACETONE
Present.

PROPAN-2-OH
Present.

16. Other information

Revision date 12/23/2015
Revision 1
SDS No. 20277
Hazard statements in full
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapor.
H280 Contains gas under pressure; may explode if heated.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to organs.
H372 Causes damage to organs through prolonged or repeated exposure.
<table>
<thead>
<tr>
<th>NFPA - health hazard</th>
<th>Irritation, minor residual injury. (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA - flammability hazard</td>
<td>Ignites easily. (3)</td>
</tr>
<tr>
<td>NFPA - instability hazard</td>
<td>Unstable if heated. (1)</td>
</tr>
<tr>
<td>NFPA - special hazard</td>
<td>N/A</td>
</tr>
<tr>
<td>ACA HMIS Health rating.</td>
<td>Slight Hazard. (1)</td>
</tr>
<tr>
<td>ACA HMIS Flammability rating.</td>
<td>Ignites easily. (3)</td>
</tr>
<tr>
<td>ACA HMIS Physical hazard rating.</td>
<td>Unstable if heated. (1)</td>
</tr>
<tr>
<td>ACA HMIS Personal protection rating.</td>
<td>B</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.