TECHNI-TOOL®
1547 North Trooper Road; P.O. Box 1117
Worcester, PA. 19490-1117
(800) 832-4866

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Product Name: Flux Remover, #758CH752
Chemical Family: Blended proprietary denatured alcohol and isopropanol.
Packaged For: Techni-Tool, Inc. 1547 North Trooper Road, Worcester, PA 19490-1117; (610) 941-2400
Emergency Telephone: CHEMTREC (800) 424-9300

2. Composition/Information on Ingredients

Chemical Name	Wt.%Range	TLV Units
Tetrafluoroethane	0-20.0	1000 ppm
CAS #811-97-2		
Isopropyl Alcohol	43.00-53.00	400 ppm
CAS # 67-63-0		
Ethyl Alcohol	43.00-53.00	1,000 ppm
CAS # 64-17-5		
Acetone	3.00-7.00	750 ppm
CAS #67-64-1		
Methanol	1.50-3.00	200 ppm
CAS #67-56-1		

All components of this material are listed on the TSCA inventory.

3. Hazard Identification

Emergency Overview: Flammable Liquid. Colorless liquid with an alcohol odor. Liquid will irritate eyes and skin under repeated or prolonged exposure. Not formulated for use on energized electrical circuits or motors. Product vapors can be moved by air currents and ignited by pilot lights, other flames, sparks, heaters, electrical equipment, static discharges or other ignition sources distant from product handling point. Keep away from children.

Potential Health Effects

Eyes: Vapor contact: Mild irritant. Liquid contact: Will irritate eyes with possible corneal injury. Persons wearing contact lenses should wear chemical protective safety glasses when exposed to this product.
Skin: For repeated contact: dry/chapped skin, risk of chronic dermatitis.
Ingestion: Can cause depression of central nervous system, nausea, stomach cramps, vomiting, diarrhea. Individual responses to methanol vary. Ingestion of less than 30 ml (0.34g/kg) of methanol has been fatal to humans. In general, a few ounces of methanol may cause blindness and death; as little a 4 ml. may be toxic if ingested.
Inhalation: At low concentration levels: may cause mild irritation to nose and throat. At high levels: headache, drowsiness and lassitude, loss of appetite, inability to concentrate.
Medical Conditions Aggravated by Exposure: Preexisting disease of the heart, lungs, skin and eyes.

4. First Aid Measures

Eyes: Immediately flush with water. Remove any contact lenses and continue flushing for 15 minutes, lifting eyelids occasionally until no evidence of the chemical remains. If irritation develops or persists call a physician.
Skin: Wash promptly with soap and water. Remove and wash contaminated clothing and shoes before reuse.
Ingestion: If conscious, immediately give 2-4 glasses of water and induce vomiting by touching finger to back of throat. Do not give stimulants. Never give anything by mouth to an unconscious person. Call a physician.
Inhalation: Remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not give Epinephrine. Call a physician.
Note to Attending Physician: There is no specific antidote to overexposure. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Immediate medical attention for acute overexposure is required.

5. Firefighting Measures

Flash Point: 0° F/-17.7° C, Tag Closed Cup, ASTM-D-56.
Flammable Limits in Air: LEL/UEL: 2.0-12.8 (% by volume)
Extinguishing Media: Use dry chemical, "alcohol" foam, CO_2; water may be ineffective, but water should be used to keep fire exposed containers cool. If a spill or leak has not ignited, use water spray to disperse vapors and protect persons attempting to stop leak. Water may be used to flush spills away from exposures and to dilute spills to nonflammable mixtures.
Special Firefighting Procedures: Evacuate personnel. Wear self contained breathing apparatus (SCBA) and full protective equipment. Keep containers cool. Aerosol containers build pressure under fire conditions causing violent bursting and dangerous propelling of container.

6. Accidental Release Measures

Spill or Leak: Evacuate area, absorb spilled liquid with commercial, nonflammable absorbent i.e. sand, vermiculite. Remove unprotected personnel. Protected personnel should remove ignition sources and shut off fire sources. Provide ventilation. Shovel (spark proof) absorbent material into drums and close. Do not flush to sewer.

7. Handling and Storage

Avoid breathing vapors or mist. Use only with adequate ventilation. Avoid repeated or prolonged contact with eyes, skin or clothing. Wash thoroughly after handling. Do not store in direct sunlight. Store in cool dry place, away from heat, sparks or flames which may generate toxic decomposition products. Vapors are heavy and may concentrate in low poorly ventilated areas.

8. Exposure Controls/Personal Protection

Respiratory Protection: Use only with adequate ventilation. Use approved NIOSH self-contained or supplied air respirators for emergencies and in situations where air may be displaced by vapors.
Eye Protection: Use chemical protective safety glasses.
Protective Clothing: Where there is potential for skin contact, use appropriate impervious gloves, apron, pants and jacket.
Exposure Guidelines: Applicable Exposure Limits.

Isopropyl Alcohol:

PEL (OSHA)	400 ppm TWA
TLV (ACGIH)	400 ppm TWA, 500 ppm STEL

Ethyl Alcohol:
PEL (OSHA) 1,000 ppm TWA
TLV (ACGIH) 1,000 ppm TWA
Acetone:
PEL (OSHA) 1,000 ppm TWA
TLV (ACGIH) 750 ppm TWA
Methanol:
PEL (OSHA) 200 ppm TWA
TLV (ACGIH) 200 ppm TWA, 250 ppm STEL
Tetrafluoroethane:
AEL (OSHA) 1000 ppm TWA, 1,000 ppm STEL
TLV (ACGIH) 1000 ppm TWA

NFPA, NPCA-HIMIS RATING:

Health	1
Flammability	3
Reactivity	1

Personal Protection rating to be supplied by user depending on use conditions.

9. Physical and Chemical Properties

Physical Form: Clear colorless liquid
Odor: Characteristic alcohol
Boiling Point: 77.6° C / 173° F
pH: Not Determined
Solubility in Water: Complete
Specific Gravity: .790 @ 15° C / 60° F
% Volatile by Weight: 100
Vapor Pressure: 39mmHg @ 20° C / 70° F
Vapor Density (air=1): 1.82

10. Reactivity

Chemical Stability: Material is stable.
Hazardous Polymerization: Will not occur.
Incompatibilities: Avoid concentrated nitric and sulfuric acids, strong oxidizers, aldehydes, acetyl chloride, halogens and halogen compounds.
Decomposition Products: Burning may produce carbon monoxide and/or carbon dioxide.

11. Toxicological Information

Oral LD50=5,045 mg/kg in rats. Dermal LD50 = 12.8 gm/kg in rabbits. Inhalation LC50=16,000 ppm/8 hour in rats.

Carcinogenicity: None of the components present in this formual are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

12. Ecological Information

Aquatic Toxicity:
96 hour LC50 in fish: >100.0 mg/L
This material is not expected to be toxic to aquatic life.

13. Disposal Considerations

Waste Disposal: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

14. Transportation Information

Ground Transport: Consumer Commodity ORM-D
Air Transport: Aerosols Flammable NOS, UN1950, Class 2.1, Pkg.Group N/A, Pkg.Instr.203 Hazard Label: Flammable Gas

15. Regulatory Information

Section 313 Supplier Information: This material contains the following toxic chemicals subject to the emergency reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40 CFR 372:

CAS#	Chemical Name	% by Weight
67-63-0	Isopropyl Alcohol	50.0 %
67-56-1	Methanol	1.88 %

This information must be included in all MSDSs that are copied and distributed for this material.

Title III Hazard Communications Sections 311, 312

Acute	Yes
Chronic	Yes
Fire	Yes
Reactivity	No

California V.O.C. Data: Contains 785 grams total VOC per liter. Contents packaged 340 grams per unit aerosol container.

16. Other Information

For additional information, call (800) 832-4866, or email: sales@Techni-Tool.com