

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND DISTRIBUTOR'S INFORMATION						
NFPA Rating: Health-1; Flammability-0; Reactivity-0; Special- -			HMIS Rating: Health-1; Flammability-0; Reactivity-0; Personal Protection-B			
Manufactured For: Triple S Address: 2 Executive Park Dr. Address: Billerica, MA 01862			DOT Hazard Classification: ORM-D Identity (trade name as used on label): SSS Contact & Circuit Board Cleaner IV #05289			
Phone: 1-800-323-2251			MSDS Number: A00369 Revision: 1			
EMERGENCY RESPONSE NUMBER: : 1(800) 255-3924			Date Prepared: 01/06/03 Prepared By: AH/IB			
NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA			Information Calls: 1-800-323-2251			
SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION						
COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)		CAS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
1,1,1,2-TETRAFLUOROETHANE		811-97-2	No	NE	NE	d
TRANS 1,2-DICHLOROETHYLENE		156-60-5	No	200	200	d
1,1,1,3,3-PENTAFLUOROBUTANE		406-58-6	No	NE	NE	d
1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE		138495-42-8	No	NE	NE	d
ETHANOL		64-17-5	No	1000	1000	d
SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS						
Boiling Point: N/A			Specific Gravity (H ₂ O=1): Concentrate Only = 1.24			
Vapor Pressure: PSIG @ 70°F (Aerosols): 50-60			Vapor Pressure (Non-Aerosols)(mm Hg and Temperature): N/A			
Vapor Density (Air = 1): greater than 1			Evaporation Rate (= 1): N/E			
Solubility in Water: None			Water Reactive: No			
Appearance and Odor: Clear, forceful, conical mist spray with ethereal odor. (Extension tube attachment delivers narrow forceful mist.)						
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA						
FLAMMABILITY as per USA FLAME PROJECTION TEST (aerosols): extinguishes flame: categorized as NON-FLAMMABLE		Auto Ignition Temperature N/E	Flammability Limits in Air by % in Volume: % LEL: N/E % UEL: N/E			
FLASH POINT AND METHOD USED (non-aerosols): N/A		EXTINGUISHER MEDIA: Foam, dry chemical, carbon dioxide.				
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus.						
Unusual Fire & Explosion Hazards: Do not expose aerosols to temperatures above 130°F or the container may rupture.						
SECTION 4 - REACTIVITY HAZARD DATA						
STABILITY [X] STABLE [] UNSTABLE			HAZARDOUS POLYMERIZATION [] WILL [X] WILL NOT OCCUR			
Incompatibility (Mat. to avoid): Strong oxidizing agents, strong bases (sodium hydroxide, potassium hydroxide), alkaline earth metals, finely powdered metals such as aluminum, magnesium or zinc.			Conditions to Avoid: Open flame, glowing metal surfaces, welding arcs, heat, sparks.			
Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, hydrofluoric acid, hydrochloric acid, chlorine and possible carbonyl fluoride.						
SECTION 5 - HEALTH HAZARD DATA						
PRIMARY ROUTES OF ENTRY: [X] INHALATION [] INGESTION [X] SKIN ABSORPTION [] EYE [] NOT HAZARDOUS						
ACUTE EFFECTS						
Inhalation: Excessive inhalation of vapors can cause central nervous system depression, dizziness, weakness, confusion, incoordination or unconsciousness. Irregular heart beat with a strange sensation in the chest, "heart thumping", apprehension, lightheadedness, feeling of fainting, dizziness, weakness may progress to loss of consciousness and death. Suffocation if air is displaced by vapors.						
Eye Contact: Irritation with tearing, pain or blurred vision. "Frostbite-like" effects may occur if vapors contact eyes.			Skin Contact: Slight irritation with itching, redness or swelling. Prolonged exposure may result in defatting of the skin. Overexposure to vapors may cause frostbite.			
Ingestion: Aspiration which may cause "chemical pneumonia". Symptoms include coughing, gasping, choking, shortness of breath, bluish discoloration of skin, rapid breathing and heart rate, and fever.						
CHRONIC EFFECTS: (Effects due to excessive exposure to the raw materials of this mixture) Excessive inhalation may result in central nervous system effects.						
Medical Conditions Generally Aggravated by Exposure: May aggravate existing eye, skin, or upper respiratory conditions.						
EMERGENCY FIRST AID PROCEDURES						
Eye Contact: Flush with water for 15 minutes. If irritated, seek medical attention.						
Skin Contact: Wash with soap and water. If irritated, seek medical attention.						
Inhalation: Remove to fresh air. Resuscitate if necessary. Get medical attention.						
Ingestion: DO NOT INDUCE VOMITING. Drink two large glasses of water. Get immediate medical attention.						
SECTION 6 - CONTROL AND PROTECTIVE MEASURES						
Respiratory Protection (specify type): If vapor concentration exceeds TLV, use respirator approved by NIOSH for organic vapor.						
Protective Gloves: Neoprene or other as recommended compatible by glove manufacturer.			Eye Protection: Safety glasses recommended.			
Ventilation Requirements: Adequate ventilation to keep vapor concentration below TLV.						
Other Protective Clothing & Equipment: None						
Hygienic Work Practices: Wash hands with soap and water before handling food.						
SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE						
Steps To Be Taken If Material Is Spilled Or Released: Absorb with suitable medium. Incinerate or landfill according to local, state or federal regulations. DO NOT FLUSH TO SEWER.						
Waste Disposal Methods: Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.						
Precautions To Be Taken In Handling & Storage: Do not puncture or incinerate containers. Do not store at temperatures above 130°F.						
Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN.						

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only