

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200. Standard must be
consulted for specific requirements

U.S. Department of Labor

Occupation Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY		Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.	
HI-TRONIC (120165)			
Section I		Consumer Commodity, ORM-D	
Manufactured by: Beaver Research Company		Emergency Telephone Number 1-800-255-3924 (Chem-Tel)	
Address (Number, Street, City, State, and ZIP Code) 3700 E. Kilgore Road, Portage, MI 49002		Telephone Number For Information 269-382-0133	
HMIS RATINGS:	Health: 1	Date Prepared	
0-Minimal 3-Serious	Flammability: 1	12/20/07	
1-Slight 4-Extreme	Reactivity: 0	Signature of Preparer (optional)	
2-Moderate	Personal Protection: B		

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS No.	313/Chem	TWA/TLV	PEL	% WT
3,3-Dichloro-1,1,1,2,2-pentafluoropropane	422-56-0	Yes	N/E	N/E	60-70
1,3-Dichloro-1,1,2,2,3-pentafluoropropane	507-55-1	Yes	N/E	N/E	01-10
1,1,1,2 - Tetrafluoroethane	811-97-2	No	N/E	N/E	20-40

Section III - Physical/Chemical Characteristics

Boiling Point	~124° F	Specific Gravity (@ 77°F)	1.55
Vapor Pressure of can (psig @70° F)	55	Total VOC %	0
Vapor Density (AIR = 1)	7.0 @ 77°F	Evaporation Rate	N/A
Solubility in Water 0.040 WT% @ 25°C	pH N/A		
Appearance and Odor Clear Colorless Liquid, Faint Ether-like Odor			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) None - TCC	Flammable Limits Non-Flammable Spray	LEL	UEL
Extinguishing Media Foam, CO2, Dry Media			
Special Fire Fighting Procedures Wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers to prevent rupturing.			
Unusual Fire and Explosion Hazards Exposure to temperature above 120°F may cause bursting.			

Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid	Open flames & exposure to high temperatures.
	Stable	X	
Incompatibility (Materials to Avoid) Incompatible with alkali or alkaline earth metals-powdered Al, Zn, Be, etc.			
Hazardous Decomposition or Byproducts Hydrochloric and Hydrofluoric acids, carbonyl halides, carbon dioxide, carbon monoxide.			
Hazardous	May Occur	Conditions to Avoid	
Polymerization	Will Not Occur	X	

Section VI - Health Hazard Data

Primary Route(s) of Entry:	Inhalation?	Eyes?	Skin?	Ingestion?
	X	X	X	
Health Hazards (Acute and Chronic)				
Eyes: May cause moderate to severe irritation and frostbite. Skin: May cause frostbite and irritation from defatting of skin. May aggravate existing skin conditions. Inhalation: Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, liver damage, unconsciousness or death. Intentional misuse can be fatal. Vapors are heavier than air and may accumulate in low lying or confined areas reducing oxygen available for breathing. Ingestion: Not likely to occur because of the physical properties of the product. Ingestion of small amounts is not likely to be hazardous. Ingestion of large quantities would likely cause gastrointestinal discomfort from excess pressure created by rapid evaporation and may result in irritation of the upper gastrointestinal tract.				
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?	
	No	No	No	
Signs and Symptoms of Exposure				
See above "Health Hazards".				
Medical Conditions Generally Aggravated by Exposure				
May aggravate existing skin conditions.				
Emergency and First Aid Procedure				

Eyes: In case of contact, immediately flush with large amounts of lukewarm water for at least 15 minutes while holding upper and lower lids open. Get medical attention. **Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Treat for possible frostbite if necessary by gently warming affected area. If irritation persists, get medical attention. **Inhalation:** Immediately remove to fresh air. If not breathing, give artificial respiration. Get medical attention. **Ingestion:** Ingestion is not likely to occur. If it does, do not induce vomiting. Get medical attention. **Note to Physician:** Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should be used with special caution and only in situations of emergency life support. Treatment of overexposure should be directed at the control of symptoms and clinical conditions.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled				
Allow propellant to evaporate. Maintain local exhaust and adequate ventilation. No smoking. Keep sparks, heat sources and open flame far away from spill or leak. Cover with absorbent material and sweep up. Wash area to prevent slipping. Dispose of soaked absorbent material in accordance with Federal, State, and local laws.				
Waste Disposal Method				
Aerosol cans, when emptied and depressurized through normal use, pose no disposal hazard and should be recycled. Consult Federal, State and local authorities for approved procedures.				
Precautions to be Taken in Handling and Storage				
Store in a cool, dry area away from heat or open flame. Do not store at temperatures above 120°F. NFPA Code 30B Rating: Level 1 Aerosol.				
Other Precautions				
KEEP OUT OF REACH OF CHILDREN. For industrial and institutional use only.				

Section VIII - Control Measures

Respiratory Protection (Specify Type)					
None needed for proper use in accordance with label directions.					
Ventilation	Local Exhaust	Yes, to keep TLV of Section 2 ingredients below acceptable limit.		Special	N/A
	Mechanical(General)	N/A		Other	N/A
Protective Gloves			Eye Protection		
Use chemical resistance gloves (neoprene preferred) to help prevent skin contact.			Wear chemical resistant safety glasses or splash goggles.		
Other Protective Clothing or Equipment					
N/A					
Work/Hygienic Practices					
N/A					

N/A=Not Applicable N/E=Not Established N/D=Not Determined <=Less Than >=More Than

This information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition. We make no warranties, express or implied, and assume no liability in connection with any use of this information.