

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

HI-P-PS ELECTRONICS CLEANER (120180)

*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.*

Section I

Manufactured For: Beaver Research Company	Emergency Telephone Number 1-800-544-0133
Address (Number, Street, City, State, and ZIP Code) 3700 E. Kilgore Rd., Portage, MI 49002	Telephone Number For Information 269-382-0133
HMIS Ratings: 4=Extreme 1=Slight 3=Serious 0=Minimal 2= Moderate	Health: 1 Flammability: 4 Reactivity: 0 Protective Equipment:
	Date Prepared 02/23/09
	Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS#	ACGIH TWA/STEL	OSHA TWA/STEL	% By WT.
Aliphatic Petroleum Solvent	64742-89-8	--	--	60-70
1,1-Difluoroethane	75-37-6	--	--	20-30
Isopropyl Alcohol	67-63-0	200 ppm/400 ppm	400 ppm/NE	8-10
Extremely flammable. Contents under pressure. Aerosol. Pressurized container may explode when exposed to heat or flame. Harmful in contact with eyes. Prolonged exposure may cause chronic effects.				

Section III - Physical/Chemical Characteristics

Boiling Point	168.8 °F (76.1°C) estimated	Specific Gravity	0.7605 estimated
Vapor Pressure	44-54 psig @70F	Melting Point	N/A
Vapor Density (AIR = 1)	ND	Evaporation Rate	ND
Solubility in Water	Not Determined		
Appearance and Odor	Clear, colorless, compressed liquified gas with solvent odor in aerosol form.		

Section IV - Fire and Explosion Hazard Data

Flash Point	Flash Back	Flammability (HOC)		
-52°F (-46.7°C)	Yes	31.383 kJ/g estimated		

Extinguishing Media

Water, water fog, foam, dry chemical powder, carbon dioxide.

Special Fire Fighting Procedures

Do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Cool containers with flooding quantities of water until well after fire is out.

Unusual Fire and Explosion Hazards

Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid	Heat, flames and sparks.
Risk of ignition.	Stable	X		

Incompatibility (Materials to Avoid)

NE

Hazardous Decomposition or Byproducts

No hazardous decomposition products are known.

Hazardous Polymerization	May Occur		Conditions to Avoid	
N/A	Will Not Occur	X		

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Eyes?	Skin?	Ingestion?
		X	X	X
Health Hazards (Acute and Chronic)				
Eyes: Contact may irritate or burn eyes. Eye contact may result in corneal injury. Skin: Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Inhalation: Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Prolonged inhalation may be harmful. Ingestion: Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion. Target organs: Lungs. Chronic effects: Conjunctiva. May cause delayed lung damage.				
Carcinogenicity:	NTP?	ACGIH?	IARC Monographs?	OSHA Regulated?
	NE	NE	NE	NE
Toxicological Information				
Acute effects: Acute LD50: 4405 mg/kg estimated, Rat, Dermal.				
Sensitization, Reproductive effects, Teratogenicity: Not expected to be hazardous by OSHA criteria.				
Medical Conditions Generally Aggravated by Exposure				
NE				

Emergency and First Aid Procedure

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists. **Skin Contact:** Immediately take off all contaminated clothing. Wash off with warm water and soap. Get medical attention if irritation develops or persists. **Inhalation:** Move to fresh air. If symptoms persist, get medical attention. **Ingestion:** If material is ingested, immediately contact a poison control center. Have victim rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Methods for containment: Eliminate all ignition sources (no smoking, flares or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up: Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Waste Disposal Method

Waste codes D001: Waste Flammable material with a flash point <140 F

Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

Precautions to be Taken in Handling and Storage

Handling: Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure.

Storage: Level 1 Aerosol. Level 3 Aerosol. Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Store in a cool place. Keep in an area equipped with sprinklers. Do not store, incinerate or heat this material above 120° F. Refrigeration recommended.

Other Precautions

Keep out of reach of children.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators. If permissible levels are exceeded, use NIOSH mechanical filter/organic vapor cartridge or an air-supplied respirator.

Ventilation	Local Exhaust	Adequate/Normal Conditions	Special	N/A
	Mechanical(General)	Optional	Other	N/A
Protective Gloves			Eye Protection	
Chemical resistant gloves.			Wear chemical goggles	
Other Protective Clothing or Equipment				
Wear chemical resistant clothing to prevent skin contact.				

Work/Hygienic Practices

Do not get this material in contact with skin. Avoid contact with eyes. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

Regulatory Information

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances – Not applicable.

US – CERCLA/SARA-Section 313-Emission Reporting

Isopropyl Alcohol 67-63-0 1.0% de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazardous categories**

Immediate Hazard – Yes

Delayed Hazard – No

Fire Hazard – Yes

Pressure Hazard – Yes

Reactivity Hazard - No

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

Yes

State regulations**US – Pennsylvania – RTK (Right to Know) List**

Isopropyl Alcohol 67-63-0 Environmental hazard

TRANSPORTATION (D.O.T. Classification):

Shipping Name: Consumer Commodity

Hazard Class: ORM-D

NG--Negligible NA--Not Applicable NE--Not Established UN--Unavailable ND--Not Determined

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