

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

Special Aluminum Cleaner (110080)

*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 1-800-255-3924 (Chem-Tel)	
Address (Number, Street, City, State, and ZIP Code) 3700 E. Kilgore Rd. Portage, MI 49002		Telephone Number For Information 1-800-544-0133	
HMIS RATINGS:	Health:	3 (Serious)	Date Prepared 02/11/99
	Flammability:	0 (Insignificant)	
	Reactivity:	0 (Minimal)	Signature of Preparer (optional)
	Protection:	D (Safety glasses/shield, gloves & clothing)	

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS No.	TLV	STEL	Carcinogen	% (optional)
Phosphoric Acid	7664-38-02	1mg/m ³	3mg/m ³	no	>30%
Hydrofluoric acid (Hydrogen Fluoride)	7664-39-3	3ppm as Fluoride		no	1%
2-butoxyethanol	111-76-2	25ppm		no	<5%
Color additives		none			trace

Section III - Physical/Chemical Characteristics

Boiling Point	est. 210°F	Specific Gravity (H ₂ O = 1)	1.3
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Viscosity, CP @ 25°C	A-5 (Gardner)	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water Complete	pH <1.0	Total VOC: 4%	
Appearance and Odor Pink-red liquid. Odor - nil.			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL N/A	UEL N/A
Extinguishing Media N/A (Product is non-flammable)			
Special Fire Fighting Procedures Avoid skin and eye contact, and breathing of acid vapors. Wear head and body protection and acid respirator if exposure to liquid is likely. If involved in a fire the product may produce toxic fumes. Use water spray for diluting.			
Unusual Fire and Explosion Hazards N/A			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid	N/A
	Stable	X		
Incompatibility (Materials to Avoid)				
Strong alkalis, glass (etches) materials not resistant to strong acids, active metals (zinc, aluminum, magnesium, etc.).				
Hazardous Decomposition or Byproducts				
Possible phosphorus oxide and hydrogen fluoride fumes at fire temperatures. Contact with active metals can release flammable gas.				
Hazardous	May Occur		Conditions to Avoid	N/A

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Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	No

Health Hazards (Acute and Chronic)

Inhalation: Breathing of vapor causes respiratory irritation and inflammation. **Skin:** *Highly Corrosive*. Causes irritation and burns. Prolonged contact with 2-butoxyethanol may result in the absorption of potentially harmful amounts leading to possible liver and kidney damage. **Eyes:** Corrosive. Causes eye damage. **Ingestion:** Corrosive. Causes irritation and burning in mouth and throat. Avoid swallowing.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	No	No	No

Signs and Symptoms of Exposure

See above "Health Hazards".

Medical Conditions Generally Aggravated by Exposure

None.

Emergency and First Aid Procedure

Skin: Remove contaminated clothing. Provide convenient safety showers. Flush skin with water for 15 minutes. Get medical attention for any burns. **Eyes:** Flush immediately with water for 15 minutes. Get prompt medical attention. **Ingestion:** If swallowed, drink lots of water or, preferably milk. Get medical attention immediately. Do not induce vomiting.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Small spills can be flushed into normal drainage or into ground with copious amounts of water, or taken up with absorbent material. Larger spills should be contained by diking or other methods and held for collection and/or reuse, or for neutralization with alkali before collection and disposal. Personnel should use eye and skin protection and respirator.

Waste Disposal Method

If neutralized, may be disposable in sewers if local regulations permit, send to licensed treatment and disposal facility. As supplied, this product is a RCRA hazardous waste. Empty Containers: Rinse well before handling and disposal. Observe label precautions.

Precautions to be Taken in Handling and Storage

Check daily for any leaks from containers, vessels, pumps, and piping. Have water hoses and alkali (caustic soda, lime, etc.) convenient. Only use containers and equipment designed for acid service. Use a respirator if area is poorly ventilated.

Other Precautions

None.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Wear approved acid/vapor/mist respirator. If working in a confined area it is suggested that an acid/vapor mist respirator be worn particularly while spraying the product.

Ventilation	Local Exhaust	Yes	Special	N/A
	Mechanical(General)	N/A	Other	N/A

Protective Gloves

Acid resistant protective gloves.

Eye Protection

Splash proof goggles or side shield safety glasses.

Other Protective Clothing or Equipment

Acid resistant boots and clothing. Provide convenient safety showers and eyewash stations.

Work/Hygienic Practices

None.

The information herein has been compiled from sources believed to be reliable and is accurate to the best of our knowledge. However, Beaver Research Company cannot give any guarantees regarding information from other sources, and expressly does not make any warranties, nor assumes any liability for its use.