

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet meets or exceeds the requirements of the Canadian Controlled Product Regulations (WHMIS)

1. Product and Supplier Identification

Product: AC-8

Product Use: Aluminum Bright Cleaner

Supplier: Canadian Building Restoration Products, Inc.,
#102 – 876 Cordova Diversion,
Vancouver, BC V6A 3R3
Emergency Telephone: (604) 254-3325

Manufacturer: American Building Restoration Products, Inc.,
9720 South 60th Street,
Milwaukee, Wisconsin, USA, 53132

2. Composition

Component	% (w/w)	Exposure Limits
Hydrofluoric acid (CAS No.7664-39-3)	<10	OSHA-PEL: 3ppm ACGIH TLV: 3ppm
Hydrochloric acid 20 Deg (CAS No.7647-01-0)	<10	OSHA-PEL: 5ppm ACGIH TLV: 5ppm

3. Hazards Identification

Routes of Entry:

Skin Contact: Major Eye Contact: Major Ingestion: Moderate Inhalation: Moderate

Acute Health Effects: Direct contact with skin will produce deep burns, which may cause scarring. This product is extremely corrosive to the eyes. Contact may cause ulceration, and permanent blindness may occur. Inhalation of hydrofluoric acid and/or hydrofluoric acid vapours are extremely irritating to the upper respiratory tract. Prolonged exposures may cause ulcerations of the nose and throat. In severe cases, pulmonary edema (severe, life threatening lung injury) may occur. Ingestion is not a primary route of entry, however, if ingested, can cause burning of the mouth, throat, stomach and esophagus. Symptoms may include difficulty swallowing, intense thirst, pain, nausea, vomiting and retching. Small amounts of acid, if aspirated into the lungs can cause serious lung damage.

Chronic Health Effects: Long-term exposure may cause dental erosion, turning tooth enamel brownish. Repeated low concentration exposure to the skin can cause redness, swelling, and

Hazards Identification, continued

dermatitis. Inhalation of hydrofluoric acid and/or hydrofluoric acid vapours, in time may cause easy bleeding of the nose and gums. Not considered to be a sensitizer.

4. First Aid Measures

Eye Contact: Flush contaminated eye(s) with lukewarm, gently running water for 60 minutes by the clock, holding eyelids open. Use a neutral saline solution, if available to bathe the eyes. **Do not interrupt** the flushing of the eyes. If necessary, keep emergency vehicle waiting. Take care not to contaminate unaffected eye, or face. Transport victim to emergency center as soon as is possible. Seek immediate medical attention.

Skin Contact: Remove contaminated clothing including watchbands, shoes, belts, etc. Flush affected area immediately with lukewarm, gently flowing water for at least 60 minutes, by the clock. **Do not interrupt** the flushing of the eyes. If necessary, keep emergency vehicle waiting. Transport victim to emergency center as soon as is possible. Seek immediate medical attention. Discard any contaminated clothing.

Inhalation: If victim has been exposed to vapours remove to fresh air. If breathing has stopped, a trained person should perform artificial respiration. Get medical attention immediately.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness. Have victim rinse mouth thoroughly with water. **Do not induce vomiting.** Dilute contents of stomach with 240 to 300 ml of water. If milk is available, it may be administered after giving water. If vomiting occurs naturally have victim lean forward to reduce risk of aspiration. Repeat dilution by giving water as above. Seek medical attention by transporting to an emergency facility quickly.

Potential for Accumulation: Will not accumulate

5. Fire Fighting Measures

Flash point:	Not applicable
Autoignition temperature:	Not applicable. See information under "Fire Fighting Instructions"
Lower Explosive Limit:	Not applicable
Upper Explosion Limit:	Not applicable
Sensitivity to Impact:	Not sensitive.
Sensitivity to Static Discharge:	Not sensitive.

Hazardous Combustion Products: At high temperatures, it will breakdown into hydrogen, fluorine and chlorine.

Extinguishing Media: Use extinguishing media compatible with acid and appropriate for burning material. Use water spray to cool fire exposed containers.

Fire Fighting Instructions: Do not enter confined fire space without proper personal protection. Use approved positive pressure self-contained breathing apparatus.

6. Accidental Release Measures

Personal Protection: See Section 8 for proper protective equipment to be worn while cleaning an accidental spill.

Environmental Precautions: Prevent product from entering sewers, natural waterways, or confined spaces.

Cleanup Procedures: Neutralize with soda ash and absorb onto sand or other inert absorbent media. Shovel into approved closable waste containers for disposal. Thoroughly flush residue with water.

7. Handling and Storage

Handling Procedures: This product is highly corrosive, producing acid vapours in air. Before handling, it is imperative that the personal equipment requirements and personal hygiene measures be followed. Inspect containers for damage or leaks before handling. Unprotected persons should avoid all contact with this product including contaminated equipment. Do not use with incompatible materials such as strong bases, reducing agents, and oxidizing materials. Avoid uses that may cause the product to mist or splash such as rinsing with high-pressure water sprays. Ensure all containers are correctly labeled indicating hazards. Keep container tightly closed when not in use. Wash face and hands thoroughly after handling, and before eating, drinking, or using tobacco products.

Storage: Store in cool, dry place and in an upright position to prevent leakage and away from acids and other incompatible materials.

8. Exposure Controls, Personal Protection

Engineering Controls: If used indoors, ensure adequate ventilation by using local exhaust. Prevent handling methods that will increase airborne vapours.

Respiratory Protection: For vapour concentrations up to 50 ppm, use chemical cartridge respirator to protect against hydrogen chloride vapours. For concentrations in excess of 50 ppm, use supplied air respirator (SAR).

Skin Protection: Use chemical protective gloves, coveralls, aprons, overshoes.

Eye and Face Protection: Chemical splash-proof goggles or face shield must be worn at all times.

Footwear: Chemical resistant boots or overshoes.

Other: Eye wash station should be located near work area.

9. Physical and Chemical Properties

Appearance:	Clear liquid	Freezing Point	0 °C
Odour:	Irritating acidic penetrating odour	Boiling Point:	67 °C
Odour Threshold:	1-5 ppm	Critical Temperature:	Not applicable.
pH:	<0.5	Relative Density:	1.06 (water = 1)
Vapour Pressure:	28 mm/Hg	Partition Coefficient:	No data
Solubility:	Infinite solubility in water.	Evaporation Rate:	No data
Vapour Density:	<1 (air = 1)		

10. Stability and Reactivity

Chemical Stability and Reactivity: Product is stable. Product reacts vigorously when mixed with strong bases.

Incompatibility: Avoid contact with oxidizing agents and reducing agents, reactions are vigorous causing heat and the formation of hydrogen gas. Reaction with acetylides, borides, carbides, and silicides may produce flammable gases such as acetylene.

Hazardous Decomposition Products: None

Hazardous Polymerization: Hazardous polymerization may occur upon reacting with certain incompatible substances.

11. Toxicological Information

Acute Exposure: Corrosive and toxic. Theoretical LD₅₀ (rabbit/oral) for product is >900 mg/kg. LC₅₀ (rat/30 minute exposure) is 8300 mg/m³.

Chronic Exposure:	See Section 3.
Exposure Limits:	See Section 2.
Irritancy:	See Section 3.
Sensitization:	See Section 3.
Carcinogenicity:	Information not available
Teratogenicity:	Information not available
Reproductive toxicity:	Information not available
Mutagenicity:	Negative in vitro mammalian cell tests.
Synergistic products:	None known.

12. Ecological Information

Environmental toxicity: No data available.

Biodegradability: No data available.

13. Disposal Considerations

Canadian Environmental Protection Act: All ingredients are listed on the DSL. Dispose according to all local, provincial and federal requirements.

14. Transport Information

Canadian Transportation of Dangerous Goods Regulations: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(Hydrofluoric Acid, Hydrochloric Acid), Class 8, UN 3264, P.G.II

International Air Transport Association (IATA): CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(Hydrofluoric Acid, Hydrochloric Acid), Class 8, UN 3264, P.G.II

International Maritime Organization (IMO): CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(Hydrofluoric Acid, Hydrochloric Acid), Class 8, UN 3264, P.G.II

15. Regulatory Information

Canadian Federal Regulations:

Canadian Environmental Protection Act: All ingredients are on the Domestic Substances List.
WHMIS Classification: D1A, E

16. Other Information

Original Preparation Date: June 17, 2003

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Comments: This Material Safety Data Sheet was prepared using information provided by Canadian Building Restoration Products, Inc., and CCINFO.

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