



Safety Data Sheet

Better Chemistry. Better Business.

Acid Brite 50

Revised: February 24, 2014

1 IDENTIFICATION

Product Code: 2541000

Other means of identification: Acid Mixture

Recommended use of the chemical and restrictions on use: Liquid Acid Mixture for Metal Finishing

Hubbard-Hall Inc.

563 South Leonard Street

Waterbury, CT 06708

Telephone: 203-756-5521

Fax number: 203-756-9017

Emergency Phone Number

CHEMTREC: 1 (800) 424-9300

International: 1(703) 527-3887

2 HAZARDS IDENTIFICATION



Signal Word: DANGER,

Hazard Category 1

Hazard Statements:

Causes severe skin burns and eye damage.

Pictogram – Corrosive

Precautionary Statements:

Prevention –

Do not breathe mists.

Wash hands thoroughly after handling.

Wear protective gloves, natural or nitrile rubber are suggested, protective chemical resistant clothing goggles and face shield.

Response –

If swallowed: Immediately call poison center or doctor. Do NOT induce vomiting. Give two glasses of water or milk. If vomiting occurs, tilt head to keep air way open.

If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention.

Wash contaminated clothing before reuse.

If inhaled: remove person to fresh air and keep comfortable breathing. Get immediate medical attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get immediate medical attention.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local, regional, national or international regulations.

***The mixture is of unknown toxicity**

3 COMPOSITION INFORMATION (Except as provided for in paragraph (i) of § 1910.1200 on trade secrets.

FOR SUBSTANCES

Chemical Name	Common Name And Synonyms	CAS No. and other Unique identifiers	Concentration %
*HYDROCHLORIC ACID	Muriatic Acid	7647-01-0	(APPROX) 21%
*PHOSPHORIC ACID	Pyrophosphoric Acid	7664-38-2	(APPROX) 12%
*SULFURIC ACID	Oil of Vitriol	7664-93-9	(APPROX) 10%
AMMONIUM BIFLUORIDE	Ammonium Acid Fluoride	1341-49-7	(APPROX) 10%
*DIPROPYLENE GLYCOL MONOMETHYL ETHER	Glycol Ethers	34590-94-8	(LESS THAN) 10%
*PROPYLENE GLYCOL MONOMETHYL ETHER	Glycol Ethers	107-98-2	(LESS THAN)

4 FIRST AID

After Inhalation: Remove exposed person to fresh air and support breathing as needed.

After Skin Contact: Quickly remove contaminated clothing. Rinse with flooding amounts of water for at least 15 minutes. After rinsing, massage in a 2.5% calcium gluconate gel until pain is relieved. If pain persists, calcium gluconate injections may be necessary. Consult a physician.

After Eye Contact: Do not allow victim to rub or keep eyes tightly shut. Gently lift eyelids and flush immediately and continuously with flooding amounts of water until transported to an emergency medical facility. Consult a physician immediately.

After ingestion: Never give anything by mouth to an unconscious person. Contact a poison control center. Unless the poison control center advises otherwise, have the conscious and alert person drink 1 or 2 glasses of water to dilute. The decision to induce vomiting is debatable. Its corrosive nature may indicate gastric lavage or binding of the fluoride ion with milk, calcium gluconate, or calcium lactate.

Most Important Symptoms/Effects

Acute:

Inhalation: May cause irritation, possibly severe) of the respiratory tract. Respiratory stimulation occurs first, followed by depressed respirations. Death may occur from respiratory paralysis.

Eye: Direct contact can cause corrosive ocular burns.

Skin: Contact is irritating and may cause nausea and unusual, large, pustular skin rash that appears similar to ballooning of the skin. Hydrofluoric acid can cause serious burns. These burns do not appear serious at first, but may generate all the way to the bone.

Ingestion: Symptoms include digestive tract irritation or corrosion, nausea and vomiting, abdominal pain, muscle weakness and spasms, dehydration, convulsion, progressive CNS depression (fatigue, coma, and respiratory arrest, even in absence of circulatory failure), cardiac arrhythmias, and excessive potassium and calcium in the blood.

Delayed:

Severe irritation to skin, eyes and respiratory tract

Chronic:

Repeated or prolonged exposure to and absorption of the fluoride ion can cause kidney damage as well as fluorosis (brittle bones, calcified ligaments and anemia).

Indication of immediate medical attention and special treatment needed, if necessary:

If any of the symptoms listed above occur and or persist.

NOTE TO PHYSICIANS: Administration of antacids (magnesium and aluminum) is suggested. Seizures may require Diazepam but can ultimately be corrected by electrolyte stabilization. Monitor EKG, electrolytes and vital signs. High concentrations of fluoride ion may be present in urine after skin contact. Sucralfate may be helpful in protecting the upper GI tract from acid injury. Consult with a poison control center on current recommendations.

SPECIAL PRECAUTIONS/ PROCEDURES: Emergency personnel should protect against secondary contamination.

5 FIRE FIGHTING MEASURES

Suitable and Unsuitable extinguishing media: Will not burn or support combustion.

Specific hazards arising from the chemical (e.g., nature of any hazardous composition products): Toxic gases when heated

Special protective equipment and precautions for firefighters: SCBA and clothing to protect against acid gases and other toxic releases.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear chemical goggle, gloves and face shield and protective clothing.

Methods and Materials for containment and cleaning up: If OSHA trained: Dam spills if possible; then neutralize spill with soda ash or lime. Flush with water to a chemical sewer or disposal system. This neutralization procedure should be conducted with good ventilation. Discharge to a disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

7 HANDLING AND STORAGE

Precautions for safe handling: Speed of removing Acid Brite 50 from skin is of primary importance. Once in contact, wash off with water immediately.

Conditions for safe storage, including any in compatibilities: Do not store in steel drums. Store locked up and away from incompatible chemicals.

8 EXPOSURE CONTROLS/ PERSONAL PROTECTION

Name	Std.	TWA-8hrs	STEL – 15 min.
*HYDROCHLORIC ACID	ACGIH/OSHA	5ppm	-
*PHOSPHORIC ACID	ACGIH/OSHA	1 MG/M3	3 MG/M3.
*SULFURIC ACID	ACGIH/OSHA	1 MG/M3	3 MG/M3
AMMONIUM BIFLUORIDE	ACGIH/OSHA	2.5 mg/m3 as Fluoride	-

*DIPROPYLENE GLYCOL MONOMETHYL ETHER	ACGIH/OSHA	100 PPM	150 PPM
*PROPYLENE GLYCOL MONOMETHYL ETHER	ACGIH/OSHA	100 PPM	150 PPM

ACGIH- American Control of Governmental Hygienists
OSHA- Occupational Safety and Health Administration

Appropriate Engineering Controls:

VENTILATION: Local exhaust is required to remove mist.

Individual protection measures:

RESPIRATORY PROTECTION: U.S. Bureau of Mines approved gas mask and canister for acid mist.

SPECIAL: N/A

OTHER: Safety shower in work area.

PROTECTIVE GLOVES: Rubber gloves.

EYE PROTECTION: Chemical goggles plus face shield.

OTHER PROTECTIVE EQUIPMENT: Rubber aprons, safety shoes and similar protective clothing.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Slight pink tint

Odor: Mild acidic odor

Odor Threshold: N/A

PH: Below 1

Melting Point/Freezing Point: N/A

Initial Boiling Point and Boiling Range: N/A

Flash Point: None

Evaporation Rate: N/A

Flammability (solid, gas): Non flammable

Upper/Lower flammability or explosive limits: N/A

Vapor Pressure: Unknown

Vapor Density: Unknown

Relative Density: N/A

Solubility (ies): Complete in water

Partition Coefficient; n-octanol/water: N/A

Auto-ignition Temperature: N/A

Decomposition Temperature: N/A

Viscosity: N/A

10 STABILITY AND REACTIVITY

Reactivity: Low

Chemical Stability: Stable

Possibility of Hazardous Reactions: Low

Conditions to Avoid: Incompatible materials

Incompatible Materials: Avoid contact with most non-ferrous and ferrous metals, strong oxidizers and alkalines.

Hazardous Decomposition Products: Acid gases

11 TOXICOLOGICAL INFORMATION

Acute toxicity

Oral administration: Not established for this product

Inhalation: Not established for this product

Dermal administration: Not established for this product

Irritation: Severe irritation or burns to skin, eyes and respiratory system

Sensitization: Not known

Symptoms related to the physical, chemical, and toxicological characteristics:

Delayed Effects: Severe irritation or burns to skin, eyes and respiratory system

Immediate Effects: Severe irritation or burns to skin, eyes and respiratory system

Short Term Exposure: Severe irritation or burns to skin, eyes and respiratory system

Long Term Exposure: Severe irritation or burns to skin, eyes and respiratory system

Numerical Measures of toxicity (such as toxicity measurements) Not known

CANCER HAZARD: Strong inorganic acid mists containing sulfuric acid can cause cancer. Risk of cancer depends on duration and level of exposure.

12 ECOLOGICAL INFORMATION

Ecotoxicity:

Fish, *Oncorhynchus mykiss*, no data available

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Fish, *Lepomis macrochirus*, no data available

***Lepomis macrochirus*, no data available**

Crustaceans, *Daphnia magna*, no data available

***Daphnia magna*, no data available**

Persistence and Degradability

Abiotic degradability: Not expected

Biotic degradability: Not expected

Bioaccumulation potential: Not known

Mobility

Water Result: Pronounced solubility and mobility.

Soil/Sediment Result: Pronounced solubility and mobility.

Other Adverse effects (such as hazardous to the ozone layer): Toxic to fish

13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, State, and Federal Regulations.

14 TRANSPORT INFORMATION

UN Number: UN3264

UN Proper Shipping Name: CORROSIVE LIQUID ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID, SULFURIC ACID, PHOSPHORIC ACID)

Transport Hazard Class (es): 8

Packing Group: II

ERG: 154

Environmental Hazards (e.g. Marine Pollutant (Yes/No): toxic to fish

15 REGULATORY INFORMATION

HMIS: Health: 3 Flammability: 0 Reactivity: 1

***HYDROCHLORIC ACID** IS REGULATED UNDER DOT HAZARDOUS MATERIALS, CLEAN AIR ACT SECTION 112 STATUTORY AIR POLLUTANTS (1990 AMENDMENT), CLEAN AIR ACT SECTION 112 (r) ACCIDENTAL RELEASE PREVENTION SUBSTANCES, CERCLA, SARA TITLE III SECTION 302, **SARA TITLE III SECTION 313, IARC GROUP 3,4 SUBSTANCES, DEA PRECURSOR AND ESSENTIAL CHEMICALS, DOT HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES, OSHA HIGHLY HAZARDOUS CHEMICALS CWA/311, OSHA AIR CONTAMINANTS, ACGIH TLV CHEMICALS, THIS SUBSTANCE IS LISTED AS A HAZARDOUS AIR POLLUTANT (HAP) UNDER TITLE III OF THE CLEAN AIR ACT AMENDMENTS OF 1990, CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM IN WHICH THE INGREDIENT MUST BE DISCLOSED AT CONCENTRATION AT 1%, MA EXTRADORDINARILY HAZARDOUS SUBSTANCE LIST, NJ RIGHT OT KNOW SPECIAL HEALTH HAZARD, NJ RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST, ACGIH: STEL IS 5 PPM OR 7.5 MG/M3; OSHA TABLE Z-1: TWA IS (C) 5 PPM OR (C) 7 MG/M3; OSHA TABLE 1-1-1: CEILING IS 5 PPM OR 7 MG/M3; EPA: CERCLA RQ IS 5000 LB; EPCRA SECION 313 DE MINIMIS CONCENTRATION IS 1.0%. ** REGULATED ONLY IN AEROSOL OR MIST FORM.

***PHOSPHORIC ACID** IS REGULATED UNDER CWA/311, CERCLA, SARA TITLE III SECTION 313, ACGIH TLV CHEMICALS, OSHA AIR CONTAMINANTS, DOT HAZARDOUS MATERIALS, DOT HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES, CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM IN WHICH THE INGREDIENT MUST BE DISCLOSED AT CONCENTRATION AT 1%, MA SUBSTANCE LIST, NJ RIGHT TO KNOW SPECIAL HEALTH HAZARD, PENN ENVIRONMENTAL HAZARDOUS LIST; EPA CERCLA RQ IS 5000 LB; EPCRA SECTION 313 DE MINIMIS CONCENTRATION IS 1.0%; ACGIH: TWA IS 1 MG/M3; STEL IS 3 MG/M3; OSHA TABLE Z-1: TWA IS 1 MG/M3; OSHA TABLE Z-1-A: TWA IS 1 MG/M3; STEL IS 3 MG/M3.

***SULFURIC ACID** IS REGULATED UNDER CWA/311, NIOSH CRITERIA DOCUMENTS, CERCLA, SARA TITLE III SECTION 302, SARA TITLE III SECTION 313, SARA SECTION 110, OSHA AIR CONTAMINANTS, ACGIH TLV CHEMICALS, DOT HAZARDOUS MATERIALS, DEA PRECURSOR AND ESSENTIAL CHEMICALS, DOT HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES,

CANADIAN IDL 1% CONC., MA SUBSTANCE LIST E, NJ RIGHT TO KNOW HAZ SUBSTANCE LIST S, PA HAZARDOUS SUBSTANCE LIST E, EPA: CERCLA RQ IS 1000 LB; TPQ IS 1000 LB.; EPCRA SECTION 313 DE MINIMIS CONCENTRATION IS 1.0%. ACGH: TWA IS 1 MG/M3; STEL IS 3 MG/M3; OSHA: TWA IS 1 MG/M3.

AMMONIUM BIFLUORIDE IS REGULATED UNDER DOT HAZARDOUS MATERIALS, CWA/311, CERCLA, DOT HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES, MA SUBSTANCE LIST, NJ RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST, PENN ENVIRONMENTAL HAZARDOUS LIST; EPA: CERCLA RQ IS 100 LB.

***DIPROPYLENE GLYCOL MONOMETHYL ETHER** IS REGULATED UNDER TSCA SECTION 4(e), OSHA AIR CONTAMINANTS, ACGIH TLV CHEMICALS, TSCA SECTION 8 (a) / 40CFR 712, TSCA SECTION 8 (d), CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM IN WHICH THE INGREDIENT MUST BE DISCLOSED AT CONCENTRATION AT 1% MA SUBSTANCE LIST, NJ RIGHT-TO-KNOW HAZARDOUS SUBSTANCE LIST, PA ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST, ACGIH: TWA IS 100 PPM OR 606 MG/M3; STEL IS 150 PPM OR 909 MG/M3; SKIN NOTATION; OSHA TABLES Z-1 & Z-1A: TWA IS 100 PPM OR 600 MG/M3; STEL IS 150 PPM OR 900 MG/M3; SKIN DESIGNATION.

***PROPYLENE GLYCOL MONOMETHYL ETHER** IS REGULATED UNDER DOT HAZARDOUS MATERIALS, TSCA SECTION 8 (a) / 40 CFR 712, TSCA SECTION 8 (d), OSHA AIR CONTAMINANTS, ACGIH TLV CHEMICALS, NJ RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST, MA SUBSTANCE LIST, PA ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST, CANADA'S WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM IN WHICH THE INGREDIENT MUST BE DISCLOSED AT CONCENTRATION AT 1%, ACGIH: TWA IS 100 PPM OR 369 MG/M3; STEL IS 150 PPM OR 553 MG/M3; OSHA TABLE Z-1-A: TWA IS 100 PPM OR 360 MG/M3; STEL IS 150 PPM OR 540 MG/M3.

*** THIS SUBSTANCE IS A CHEMICAL SUBJECT TO SARA TITLE III, SECTION 313 REPORTING REQUIREMENTS.**

RISK PHRASES: R20/21 Harmful by inhalation and in contact with skin. **R34** Causes burns. **R41** Risk of serious damage to eyes. **R45** May cause cancer

SAFETY PHRASES: S24/25 Avoid contact with skin and eyes. **S53** Avoid exposure- obtain special instructions before use.

16 OTHER INFORMATION

No RoHS or REACH SVHC are contained in this product.

N/A: Not Applicable

Further information

The information is based on our knowledge to date but does not constitute an assurance of product properties and does not imply a legal contractual relationship.

Changes from the previous data sheet with date of issue: New