



ZEP Manufacturing Company
 Acuity Specialty Products Group, Inc.
 P.O. Box 2015
 Atlanta, GA 30301
 1-877-I-BUY-ZEP (428-9937)

Material Safety Data Sheet

and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name ZEP-A- LUME
Product Use Aluminum Cleaner
Product Code 1063
Date of issue 07/12/04 **Supersedes** 12/19/00

Emergency For MSDS Information:
Telephone Numbers Acuity Specialty Products Group, Inc.
Compliance Services 1-877-I-BUY-ZEP

For Medical Emergency:
 INFOTRAC
 (877) 541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency:
 CHEMTREC
 (800) 424-9300 - All Calls Recorded
 In the District of Columbia (202) 483-7616

Printing date: 07/14/04

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
SULFURIC ACID; oil of vitriol	7664-93-9	10-20	OSHA PEL (United States). TWA: 1 mg/m ³ Form: Mist
HYDROFLUORIC ACID ; hydrogen fluoride; hydrofluoride	7664-39-3	5-10	OSHA PEL (United States). TWA: 3 ppm ACGIH/OSHA (United States). STEL: 6 ppm
PHOSPHORIC ACID	7664-38-2	<5	OSHA PEL (United States). TWA: 1 mg/m ³ OSHA / ACGIH (United States). STEL: 3 mg/m ³
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	<5	ACGIH TLV (United States). Skin TWA: 20 ppm Form: Vapor OSHA PEL (United States). Skin TWA: 25 ppm Form: Vapor

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Absorbed through skin. Eye contact. Inhalation. Ingestion.

Skin Hazardous in case of skin contact (corrosive). Skin contact may produce burns. Contact results in immediate skin absorption which may cause hypocalcemia (calcium loss) . This effect may be delayed for several hours after exposure. Severe over-exposure by absorption can result in death. Get immediate medical attention.

Eyes Hazardous in case of eye contact (corrosive). Eye contact can result in corneal damage or blindness.

Inhalation Hazardous in case of inhalation. Vapors and aerosol can produce mucous membrane, nose and throat irritation. May cause inflammation and pulmonary edema. May be fatal if inhaled.

Ingestion May be fatal if swallowed. May cause burns to mouth, throat and stomach. May cause Impaired kidney function.

HMIS	
Health	3
Fire Hazard	0
Reactivity	0
Personal Protection	X

Carcinogenic Effects Strong inorganic acid mists containing sulfuric acid: Classified Group 1 (Proven for human) by IARC; Group 1 (Known To Be Human Carcinogen) by NTP

Chronic Effects

The substance may be toxic to kidneys. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated skin exposure can produce local skin destruction, or dermatitis.

See Toxicological Information (section 11)

Section 4. First Aid Measures**Eye Contact**

Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses. Cold water may be used. Get medical attention immediately.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Get immediate medical attention while applying and massaging 2.5% calcium gluconate gel, or while soaking skin with 0.13% zephiran chloride solution.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures**Flash Point**

None.

Flammable Limits Not applicable.

**Flammability**

Non combustible.

Fire Hazard

May emit toxic fumes under fire conditions.

Fire-Fighting Procedures

Use water spray, fog or foam. Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental Release Measures**Spill Clean up**

Put on appropriate personal protective equipment (see Section 8). Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. To clean the floor and all objects contaminated by this material, use detergent. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Section 7. Handling and Storage**Handling**

Do not get in eyes, on skin, or on clothing. Put on appropriate personal protective equipment (see Section 8). Do not ingest. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Wash contaminated clothing before reusing.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Store between 40°F - 120°F (4.4°C - 49°C). Store away from incompatible materials.

Section 8. Exposure Controls, Personal Protection**Personal Protection****Protective Clothing (Pictograms)****Eyes**

Splash goggles. Face shield.

**Body**

Wear chemical resistant gloves, a chemical resistant suit, and boots.

Respiratory

Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties**Physical State**

Liquid.

Color Clear. Colorless.

pH

Acidic.

Odor Sour. Acid. (Strong.)

Boiling Point

104.44°C (220°F)

Vapor Pressure Not applicable.

Specific Gravity

1.12 (Water = 1)

Vapor Density Not determined.

Solubility

Easily soluble in cold water, hot water.

Evaporation Rate 1 compared to Water

VOC (Consumer) 55 (g/l). (4.9%)

Section 10. Stability and Reactivity**Stability and Reactivity**

The product is stable.

Incompatibility

Reactive with oxidizing agents, alkalis.

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

May emit toxic fumes under fire conditions. Hydrogen Fluoride (HF) and sulfur oxides (SO₂, SO₃...)

Section 11. Toxicological Information**Toxicity to Animals****Sulfuric Acid:**

ORAL (LD50): Acute: 2140 mg/kg [Rat].

Hydrofluoric acid:

VAPOR (LC50): Acute: 1276 ppm 1 hour(s) [Rat].

Phosphoric acid:

ORAL (LD50): Acute: 1530 mg/kg [Rat].

DERMAL (LD50): Acute: 2740 mg/kg [Rabbit]. >1260 mg/kg [Rat].

Ethylene Glycol Monobutyl Ether:

ORAL (LD50): Acute: 1746 mg/kg [Rat]. 1519 mg/kg [Mouse]. 1414 mg/kg [Guinea pig].

DERMAL (LD50): Acute: 435 mg/kg [Rabbit]. >2000 mg/kg [Guinea pig].

VAPOR (LC50): Acute: 700 ppm 7 hour(s) [Mouse]. >633 ppm 1 hour(s) [Guinea pig].
>691 ppm 1 hour(s) [Guinea pig].**Section 12. Ecological Information****Ecotoxicity**

Not available.

Biodegradable/OECD

Not available.

Section 13. Disposal Considerations**Waste**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream

Code: D002

Classification: - (Corrosive. Hazardous waste.)

Origin: - (Hazardous Waste Regulation)

Consult your local or regional authorities.

Section 14. Transport Information**Proper shipping name**

Corrosive liquids, poisonous, n.o.s. (Hydrofluoric acid, Sulfuric Acid)

DOT Classification

Class 8: Corrosive liquid. Class 6.1: Poisonous material.

UN number 2922**Section 15. Regulatory Information****U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

Sulfuric Acid

Hydrofluoric acid

Ethylene Glycol Monobutyl Ether

Clean Water Act (CWA) 311: Sulfuric Acid; Hydrofluoric acid; Phosphoric acid

Clean air act (CAA) 112 regulated toxic substances: Ethylene Glycol Monobutyl Ether

Section 16. Other Information*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.**Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*