Handy Alumibraze 300/302 and LTB37

Safety Data Sheet

1. Product and Company Identification

Manufacturer

Lucas-Milhaupt, Inc.
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Telephone: 414-769-6000
www.lucasmilhaupt.com

Emergency Phone Number

Chemtrec: 800-424-9300

SDS Number: 586

Product Codes: 72-300 (Handy Alumibraze 300), 72-302 (Handy Alumibraze 302), 72-306 (LTB 305)

Product Use(s): Metal brazing preparation

2. Hazards Identification

Classification(s)

Acute Toxicity, Oral: Hazard Category 4

Label Symbol(s): Exclamation Point

Label Signal Word(s): Warning

Label Hazard Statement(s)

Harmful if swallowed.

Label Precautionary Statement(s)

Wash hands thoroughly after handling.
Do not eat, drink, or smoke when using this product.

IF SWALLOWED: Rinse mouth. Do not induce vomiting unless so instructed by medical personnel. Call a Poison Control Center/doctor if you feel unwell.

Dispose of contents/container in accordance with applicable regulations.
The acute toxicities of 75-89% of the product’s ingredients are unknown.

3. Composition/Information on Ingredients

Ingredient	CAS Number	%	Impurities
Aluminum	7429-90-5	75-85	None known
Aluminum fluoride	7784-18-1	3-15	None known
Copper	7440-50-8	<1-4	None known
Silicon	7440-21-3	10-12	None known

4. First Aid Measures

Eyes

Flush affected areas with water for at least 15 minutes. Seek medical assistance if necessary.

Skin

Remove contaminated clothing. Wash affected area with large quantities of water for at least five minutes. Seek medical attention if necessary. Launder or dry-clean clothing before reuse.

Ingestion

Do not induce vomiting unless so directed by medical personnel. Seek immediate medical assistance. Do not attempt to give anything by mouth to an unconscious or convulsive person.

Inhalation

If signs and symptoms of toxicity are observed, remove subject from area, administer oxygen, and seek medical attention. Keep the subject warm and at rest. Perform artificial respiration if breathing has stopped.

Note to Physician or Poison Control Center

The component aluminum fluoride may be harmful if ingested. It's concentration in the product is <150 gm/kg. No components are readily absorbed through the skin, although prolonged contact may cause irritation.

5. Fire Fighting Measures

Extinguishing Media

Dry chemical, foam, or carbon dioxide. Do not use water.

Fire and Explosion Hazards

This product is nonflammable and nonexplosive. If it is present in a fire or explosion potential decomposition byproducts include aluminum, silicon and copper oxides and/or fluorides.

Fire Fighting Instructions

If fighting a fire in which this product is present, wear a self-contained breathing apparatus with full-facepiece operated in pressure-demand or other positive pressure mode.

6. Accidental Release Measures

Methods and Materials

Isolate spilled product and transfer to impervious containers.

Personal Precautions

Avoid contact with skin, eyes, and mucous membranes. Wear appropriate protective equipment (e.g., gloves, chemical goggles) during cleanup.

Environmental Precautions

Prevent spills from entering sewers or contaminating soil.

7. Handling and Storage

Handling Precautions

Avoid contact with skin and clothing, using protective equipment as needed.

Work and Hygiene Practices

To prevent ingestion following use of the product, wash hands and face before eating, drinking, applying cosmetics, or using tobacco. Remove contaminated clothing or protective equipment before entering eating/drinking areas.

Storage Precautions

Store away from incompatible materials (see Section #10).

8. Exposure Controls and Personal Protection

Ingredients - Exposure Limits

Aluminum
ACGIH TLVs: 1 mg/m3 (Respirable Fraction)
OSHA PELs: 15 mg/m (Total Dust); 5 mg/m3 (Respirable Fraction)
Aluminum fluoride
ACGIH TLV: 2.5 mg/m3 (as F-) OSHA PEL: 2.5 mg/m3 (as F-)
Copper
ACGIH TLVs: 0.2 mg/m3 TWA (fume); 1 mg/m3 TWA (dusts and mists)
OSHA PELs: 0.1 mg/m3 TWA (fume); 1 mg/m3 TWA (dusts and mists)
Silicon
No ACGIH TLV(s)
OSHA PELs: 15 mg/m (Total Dust); 5 mg/m3 (Respirable Fraction)

Ingredients – Biological Limits

Aluminum
No ACGIH BEI(s) or other biological limit(s)
Aluminum fluoride
ACGIH BEIs for fluoride in urine: 2 mg/l. prior to shift
3 mg/l. end of shift
Copper
No ACGIH BEI(s) or other biological limit(s)
Silicon
No ACGIH BEI(s) or other biological limit(s)

Engineering Controls

Use dilution or local exhaust ventilation adequate to maintain concentrations of all components and their byproducts to within their applicable standards.

Eye/Face Protection

Wear eye protection adequate to prevent eye contact with the product and injury if the product is used with a flame. Plastic-frame spectacles with side shields and filter lenses (shade #3/#4) are recommended.

Skin Protection

Wear protective gloves and clothing to prevent skin injuries if the product is used with a flame and/or for prolonged contact with the product. Avoid flammable fabrics.

Respiratory Protection

If an exposure level exceeds an applicable standard, use a NIOSH-approved respirator having a configuration (facepiece, filter media, assigned protection factor, etc.) effective for the concentration of the component(s) generated. For guidance on selection and use of respirators, consult American National Standard Z88.2 (ANSI, New York, NY 10036, USA).

9. Physical and Chemical Properties

Appearance: gray powder
Odor: none
Odor threshold: not applicable
pH: not applicable
Melting point: not applicable
Freezing point: not applicable
Boiling point: not applicable
Boiling range: not determined
Flash Point: not applicable
Autoignition Point: not applicable
Flammability Class: not applicable
Lower Explosive Limit: not applicable
Upper Explosive Limit: not applicable
Vapor pressure: not applicable
Vapor density: not applicable
Evaporation Rate: not applicable
Relative density (H2O): not determined
Solubility (H2O): partial
Oil-water partition coefficient: not applicable
Decomposition temperature: not determined
Viscosity: not applicable

10. Stability and Reactivity

Reactivity: none reasonably foreseeable
Stability: stable
Hazardous Polymerization: will not occur
Possible Hazardous Reactions: Copper can form an unstable acetylide in contact with acetylene gas.

Incompatible Materials

Acetylene; ammonium nitrate; halogens; ethylene oxide; chlorine trifluoride; oxygen difluoride; hydrazine mononitrate; hydrazoic acid; hydrogen sulfide; peroxides; azides; bromates, chlorates, and iodates of alkali metals and alkali earth metals; antimony trichloride; arsenic trichloride; carbon disulfide; carbon tetrachloride; halogenated hydrocarbons; chromic anhydride; copper oxide; diborane; performic acid; phosgene; silver chloride; sulfates; alkali carbonates; cesium and rubidium carbides; cobaltic fluoride; iodine pentafluoride; silver fluoride; calcium; sodium; potassium.

Hazardous Decomposition Products

Aluminum oxide, silicon oxide, copper oxide, and/or fluorides.

11. Toxicological Information

This product has not been tested for toxicology by the manufacturer.

Ingredients - Toxicological Data

Aluminum
LD50: No data available LC50: No data available
Aluminum fluoride
LDLo: >600 mg/kg (oral/guinea pig) LC50: No data available
Copper
LD50: No data available LC50: No data available
Silicon
LD50: 3,160 mg/kg (oral/rat) LC50: No data available

Primary Routes(s) of Entry

Ingestion; inhalation.

Eye Hazards

This product can cause eye irritation.

Skin Hazards

This product can produce dermal irritation, particularly on abraded skin.

Ingestion Hazards

Some components of this product are potentially harmful if ingested, and ingestion may cause one or more of the following symptoms and effects: nausea, vomiting, diarrhea, gastrointestinal irritation, and cramps.

Inhalation Hazards

Inhalation of toxicologically-significant quantities of the components is unlikely when the product is used in accordance with instructions and specified protective measures (see Section #8).

Symptoms Related to Overexposure

Pre-existing pulmonary diseases (e.g., bronchitis, asthma) may be aggravated by inhalation overexposure.

Delayed Effects from Long Term Overexposure

Chronic overexposure by ingestion may aggravate pre-existing diseases of the gastrointestinal system.

Carcinogenicity

This product contains no chemicals classified as potential or demonstrated carcinogens by IARC, NTP, or OSHA.

Germ Cell Mutagenicity

The products contain no chemicals determined to be germ cell mutagens.

Reproductive Effects

The products contain no chemicals determined to be harmful to fertility or to the unborn child.

Acute Toxicity Estimates

LD50 (oral): no data available
LD50 (dermal): no data available
LC50: no data available

Interactive Effects of Components: no data available

12. Ecological Information

No ecological data is available for the product. Ecological data for the components is as follows:

Aluminum

Aquatic Toxicity to Fish: NOEC >100 mg/l. for 4 d. (freshwater fish)
Aquatic Toxicity to Invertebrates: NOEC >100 mg/l. for 48 h. (Daphnia)
Aquatic Toxicity to Plants: NOEC >100 mg/l. for 3 d. (Algae)
No data available for Aquatic Toxicity to Microorganisms, Toxicity to Terrestrial Organisms, Persistence and Degradability, Bioaccumulation Potential, or Mobility in Soil.

Aluminum fluoride

No data available for Aquatic Toxicity to Fish, Invertebrates, Plants, or Microorganisms, Toxicity to Terrestrial Organisms, Persistence and Degradability, Bioaccumulation Potential, or Mobility in Soil.

Copper

No data available for Aquatic Toxicity to Fish, Invertebrates, Plants, or Microorganisms, Toxicity to Terrestrial Organisms, Persistence and Degradability, Bioaccumulation Potential, or Mobility in Soil.

Silicon

No data available for Aquatic Toxicity to Fish, Invertebrates, Plants, or Microorganisms, Toxicity to Terrestrial Organisms, Persistence and Degradability, Bioaccumulation Potential, or Mobility in Soil.

Ozone Depletion Potential: This product contains no ingredients listed in the Annexes to the Montréal Protocol on Substances that Deplete the Ozone Layer.

13. Disposal Considerations

Do not discharge waste product into sanitary or storm sewers or allow it to contaminate soil. Consult applicable Federal, State/Provincial, and local regulations.

14. Transport Information

Transport is not regulated by USDOT, TDG (Canada), IATA, or IMO.

15. Regulatory Information

United States Regulatory Information

All components of this product are listed on the EPA's TSCA inventory.

SARA Hazard Classes: Acute Health Hazard; Chronic Health Hazard

SARA Section 313 Notification: This product contains these ingredients in concentrations >1% (for carcinogens >0.1%) regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

1. Aluminum (CASRN 7429-90-5)
2. Copper (CASRN 7440-50-8)

Canadian Regulatory Information

All components of this product are listed on either the Domestic Substances List (DSL) or the Nondomestic Substances List (NDSL).

WHMIS Class(es) and Division(s): D2B
Components on Ingredients Disclosure List:

1. Aluminum, elemental (CASRN 7429-90-5)
2. Copper, elemental (CASRN 7440-50-8)
3. Fluoride compounds, inorganic, n.o.s.

This product has been classified according to the hazard criteria of the CPR and this SDS contains all of the information required by the CPR.

16. Other Information

HMIS Ratings (Legend)

Health – 1* (slight chronic hazard)
Flammability – 1 (slight hazard)
Physical Hazard – 0 (minimal hazard)
PPE - see Note

Note: Lucas-Milhaupt, Inc. recommends use of protective eyewear and gloves (Personal Protection Index "B") as standard PPE. HMIS recommends that its ratings be used only in conjunction with a fully implemented HMIS program, and that specific PPE codes be created by the user, who is familiar with the actual conditions under which the product is used. We cannot anticipate every condition of the product's use, and it is the user's responsibility to evaluate the hazards pertinent to its specific operations, and to determine the specific PPE required.

NFPA Ratings

Health - 1 Flammability - 1 Reactivity – 0

Preparation Information

Date of Preparation: 13 January 2014
Date of Prior SDS: 13 May 2011

Disclaimer

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Lucas-Milhaupt, Inc.