Stop-Off 470W, 470WM1, 470WM2, and 470P

Safety Data Sheet

1. Product and Company Identification

Manufacturer

Lucas-Milhaupt, Inc.
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Emergency Phone Number

Chemtrec: 800-424-9300

SDS Number: 595

Product Codes: 83-920 (Stop Off 47WM1), 83-922 (Stop Off 470W), 83-923 (Stop Off 470WM2), 83-924 (Stop Off 470P)

Product Use(s): Metal brazing inhibitor

2. Hazards Identification

Classification(s)

Skin Corrosion/Irritation: Hazard Category 2
Eye Damage/Irritation: Hazard Category 2B

Label Symbol(s): Exclamation Point

Label Signal Word(s): Warning

Label Hazard Statement(s)

Causes skin and eye irritation.

Label Precautionary Statement(s)

Wear protective gloves and eye/face protection.
Wash hands thoroughly after handling.

IF ON SKIN: Wash with plenty of water. Take of contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

IF IN EYES: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Dispose of contents/container in accordance with applicable regulations.

3. Composition/Information on Ingredients

Ingredient	CAS Number	%	Impurities
Aluminum Oxide	1344-28-1	60-70	None known
Hexylene Glycol	107-41-5	2-8	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 directed to do so 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

No components are toxic by ingestion, nor are any readily absorbed through the skin, although contact may cause skin irritation.

5. Fire Fighting Measures

Extinguishing Media

Dry chemical, foam, or carbon dioxide.

Fire and Explosion Hazards

This product is potentially combustible if exposed to sources of ignition at temperatures exceeding its flash point or at temperatures in excess of its autoignition temperature. If it is present in a fire or explosion, however, potential decomposition byproducts may include aluminum oxide, carbon monoxide, smoke, and irritant gases.

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 in a dry location away from incompatible materials (see Section #10).

8. Exposure Controls and Personal Protection

Ingredients - Exposure Limits

Aluminum Oxide
    ACGIH TLV: 1 mg/m3 TWA (respirable fraction)
    OSHA PELs: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Hexylene Glycol
    ACGIH TLV: 25 ppm "Ceiling" No OSHA PEL(s)

Ingredients – Biological Limits

Aluminum Oxide
    No ACGIH BEI(s) or other biological limit(s)
Hexylene Glycol
    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: thick paste
Odor: faint
Odor threshold: not determined
pH: not determined
Melting point: not applicable
Freezing point: not determined
Boiling point: >212F./100C.
Boiling range: not determined
Flash Point: >200F./93C.
Autoignition Point: >580F./304C.
Flammability Class: IIIB
Lower Explosive Limit: not determined
Upper Explosive Limit: not determined
Vapor pressure: <0.1 mm. Hg @ 20C.
Vapor density: not determined
Evaporation Rate: not determined
Relative density (H2O): not determined
Solubility (H2O): soluble
Oil-water partition coefficient: not determined
Decomposition temperature: not determined
Viscosity: not determined

10. Stability and Reactivity

Reactivity: none reasonably foreseeable
Stability: stable
Hazardous Polymerization: will not occur
Possible Hazardous Reactions: Some components may decompose at elevated temperatures.

Incompatible Materials

Strong acids; oxidizing agents.

Hazardous Decomposition Products

Aluminum oxide fume, carbon monoxide, smoke, and irritant gases.

11. Toxicological Information

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

Ingredients - Toxicological Data

Aluminum oxide
    LD50: >5,000 mg/kg (oral/rat) LC50: No data available
Hexylene Glycol
    LD50: 3,700 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). If the product is heated to elevated temperatures, inhalation of mists or vapors of hexylene glycol can irritate the nose, throat, and upper respiratory tract.

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): >4,000 mg/kg
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 Oxide

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.

Hexylene glycol

Aquatic toxicity to Fish: LC50 >5,000 mg/l. for 4 d. (Freshwater fish)
Aquatic toxicity to Invertebrates: EC50 = 3,200 mg/l. for 2 d. (Crustacea)
No data available for Aquatic Toxicity to 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 no 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.

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. Hexylene glycol (CASRN 107-41-5)

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 – 2 (moderate 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 - 2 Flammability - 1 Reactivity – 0

Preparation Information

Date of Preparation: 22 July 2014
Date of Prior SDS: 27 July 2011

Disclaimer

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Lucas-Milhaupt, Inc.