

MATERIAL SAFETY DATA SHEET

BIRCHWOOD CASEY®
LUMICLAD BLACK OXIDE

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DATE REVISED: 8/08/08
REVISION MSDS NO. 6400-01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **LUMICLAD BLACK OXIDE**

PRODUCT PART NUMBERS: 640050, 640051, 640058

MANUFACTURED BY: BIRCHWOOD LABORATORIES, INCORPORATED

7900 Fuller Road

Eden Prairie, MN 55344 USA

Product Information Telephone Number: (952) 937-7900 (8:00-4:00pm CST)

Fax Number: (952) 937-7979

www.birchwoodcasey.com

24 HOUR TRANSPORTATION EMERGENCY NUMBER: CHEMTREC 800-424-9300 U.S. & CANADA
703-527-3887 INTERNATIONAL (Collect)

24 HOUR POISON CONTROL EMERGENCY NUMBER: 866-291-7152 U.S. & CANADA

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **DANGER! Corrosive.** May be harmful if inhaled. May be harmful or fatal if swallowed. Causes severe burns to eyes and skin.

APPEARANCE/ODOR: Colorless liquid, amine odor.

EYE CONTACT: Severe or permanent eye damage.

SKIN CONTACT: Severe irritation and possible burns.

INGESTION: Severe burns of mouth, throat and stomach. Possible symptoms include nausea, vomiting, abdominal pain. May cause damage to kidneys, resulting in blood in urine.

INHALATION: If sprayed, severe irritation of respiratory tract and mucous membranes; coughing, difficulty breathing.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Description	CAS #	Weight %	OSHA PEL* TWA	OSHA PEL STEL/C	ACGIH TLV TWA	ACGIH TLV STEL/C
Ammonium Heptamolybdate	12027-67-7	< 7	5 mg/m ³	NE	5 mg/m ³	NE
2-Amino-2-methyl-1-propanol	124-68-5	< 6	NE	NE	NE	NE
Fluoboric Acid	16872-11-0	< 3	2.5 mg/m ³ ***	NE	2.5 mg/m ³ **	NE
Water	7332-18-5	> 84	NE	NE	NE	NE

TWA – Time-weighted Average **STEL** – Short-term exposure limit **C** – Ceiling

(skin) – skin designation means that harmful amounts may be absorbed through the skin

* Certain States enforce PELs that were in place in 1989, but were later removed by the U.S. Supreme Court. Check with your State OSHA to determine which PEL is enforced in your State. *** as fluorides.

NE = not established **NA** = not applicable **NDA** = no data available

4. FIRST AID MEASURES

EYE CONTACT: Flush immediately with clean water. Continue for at least 15 minutes. Seek immediate medical attention.

SKIN CONTACT: Remove contaminated clothing to avoid prolonged contact. Wash affected areas with water. Seek medical attention if irritation develops.

INGESTION: If victim is conscious, administer 1 or 2 glasses of milk or water, and contact poison control center or physician immediately. **DO NOT** induce vomiting.

INHALATION: Remove from exposure. Seek medical attention if necessary if breathing is difficult.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASHPOINT: None

METHOD USED: NA

FLAMMABLE LIMITS: LFL: NA

UFL: NA

EXTINGUISHING MEDIA: Water spray, dry chemical, alcohol foam, or carbon dioxide.

FIRE & EXPLOSION HAZARDS: NDA

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear approved SCBA and full turn-out gear.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear recommended protective equipment. Recover as much free liquid as possible and collect in acid-resistant container. Use absorbent to pick up residue. Avoid discharging liquid directly into a sewer or surface waters.

Review current local, state and federal laws, codes, statutes, and regulations to determine appropriate agencies to be notified, and the conditions under which they are to be notified. (See Section 13 for waste disposal comments).

7. HANDLING AND STORAGE

HANDLING: Avoid breathing mists or spray. Avoid eye and skin contact. Wear protective equipment when handling product. Keep out of the reach of children.

STORAGE: Store in cool, dry area. Store in acid-resistant containers. Keep containers covered when not in use. Avoid storing with incompatible materials (refer to Section 10).

8. EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use a NIOSH approved respirator (Half or full-face, acidic mist) if any of the occupational exposure limits in Section 3 may be exceeded.

EYE PROTECTION: goggles, face shield

PROTECTIVE GLOVES: butyl rubber

BODY PROTECTION: butyl rubber apron, as needed

VENTILATION: Use general/dilution or local exhaust ventilation as needed to ensure that occupational exposure limits are not exceeded.

OTHER PROTECTIVE EQUIPMENT: Eyewash and emergency shower

NOTE: All PPE should be selected on the basis of an exposure assessment performed by a competent person.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: > 212°F

VAPOR PRESSURE: NDA

VAPOR DENSITY: (Air = 1): NA

SOLUBILITY IN WATER: Complete

APPEARANCE: Colorless liquid

SPECIFIC GRAVITY: (Water = 1): 1.040

VOLATILE BY VOLUME: NA

EVAPORATION RATE: (Ethyl Ether = 1): > 1

pH: < 1

ODOR: Amine odor

10. STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: NDA

INCOMPATIBILITY (materials to avoid): Cyanides, strong oxidizers, furfuryl alcohol, most metals, sodium hypochlorite

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce oxides of carbon, formic acid

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

There is no product based toxicological information for this product. Toxicology information is provided based on individual ingredients.

LD₅₀, oral, rat: 4055 mg/kg

TARGET ORGANS: Eyes, skin, lungs (corrosive), kidneys.

Medical conditions that may be aggravated by exposure: Pre-existing skin, eye, respiratory or kidney disorders.

Carcinogenicity: IARC: None NTP: None OSHA: None

12. ECOLOGICAL INFORMATION

ECOTOXICITY: NDA

ENVIRONMENTAL FATE: NDA

13. DISPOSAL CONSIDERATIONS

This product exhibits the characteristic of corrosivity (EPA Hazardous Waste Number D002). Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 2. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and disposal of hazardous waste must be dealt with by a licensed facility or waste hauler.

14. TRANSPORT INFORMATION

D.O.T. HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME:

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Fluoboric Acid) 8 / UN3264 / P.G. III Exceptions: 49CFR 173.154

15. REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCES CONTROL ACT): the materials in this product are listed on the TSCA Inventory.

CERCLA (Comprehensive Response compensation and Liability Act, 40 CFR 117, 302: Reportable Quantity = 5,000 lb.

SARA TITLE III (Superfund Amendments and Authorization Act):

Section 311/312:

Immediate Health Effects: Yes

Delayed Health Effects: Yes

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactivity Hazard: No

Section 313 Reportable Ingredients: None

STATE "RIGHT-TO-KNOW": This product may contain components cited on certain state lists. Consult with your individual State regarding this product's components.

16. OTHER INFORMATION

National Fire Protection Association (NFPA): Health: 3 Flammability: 0 Reactivity: 0

The data here is for hazard communication to our employees, our customers and their employees, and authorized regulatory agencies. For the intended purpose, this MSDS (Material Safety data Sheet) may be duplicated or the data transcribed to an alternative form.

NOTE: The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Birchwood Laboratories, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular period. Accordingly, Birchwood Laboratories, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information. **NO REPRESENTATIONS, OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER TO WHICH THE INFORMATION REFERS.** The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.

FOR ASSISTANCE WITH PLACING ORDERS:

- Product Pricing / Payment Terms
- Shipping and Tracing of Shipments
- Sales Rep Locations

Call our Sales Department (952) 937-7931

Or 1-800-328-6156 or Fax (952) 937-7979

FOR PRODUCT USAGE ASSISTANCE

- Questions on Operation of Products
- Solving Finishing Problems
- Operator Safety and Pollution Control

Call our Customer Service Desk Department (952) 937-7931

Or 1-800-328-6156 or Fax (952) 937-7979