

MATERIAL SAFETY DATA SHEET

NEW HERMES
GRAVOXIDE

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DATE REVISED: 6/1/10
REVISION MSDS NO. 5418-5

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **NEW HERMES GRAVOXIDE**

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! POISON. Corrosive.** May be fatal if swallowed or harmful if inhaled. Causes severe burns to eyes and skin. **OXIDIZER.** Combustible materials that contact this product may ignite more easily and burn more intensely. Avoid shock, heat, friction.

APPEARANCE/ODOR: Clear liquid, odorless.

EYE CONTACT: Severe or permanent eye damage, symptoms of redness, burning.

SKIN CONTACT: Burns upon direct contact, symptoms of redness, burning.

INGESTION: Severe burns of mouth, throat and stomach; methemoglobinemia, cyanosis. Other possible symptoms include nausea, abdominal pain, vomiting.

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
Selenious Acid**	7783-00-8	4	0.2 mg/m ³	NE	0.2 mg/m ³	NE
Nitric Acid	7697-37-2	2	5 mg/m ³	NE	5.2 mg/m ³	10 mg/m ³ -STEL
Cupric Nitrate	10031-43-3	4	1 mg/m ³	NE	1 mg/m ³	NE
Phosphoric Acid	7664-38-2	8	1 mg/m ³	NE	1 mg/m ³	3 mg/m ³ -STEL
Water	7732-18-5	82	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.

** OELs as Selenium Compounds

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: Do not induce vomiting - call poison control center IMMEDIATELY (866-291-7152) for further instructions.

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: Non-flammable. Use media as appropriate for surrounding materials.

FIRE & EXPLOSION HAZARDS: May react with metals to release hydrogen gas, which can form explosive mixtures with air.

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). Empty containers may retain hazardous (solid) product residues.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use a NIOSH approved respirator (supplied air type) if any of the occupational exposure limits in Section 3 may be exceeded.

EYE PROTECTION: goggles, face shield

PROTECTIVE GLOVES / BODY PROTECTION: neoprene

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): < 1
SOLUBILITY IN WATER: Complete
APPEARANCE: Clear liquid

SPECIFIC GRAVITY: (Water = 1): 1.130
VOLATILE BY VOLUME: NA
EVAPORATION RATE: (Ethyl Ether = 1): < 1
pH: 0.99
ODOR: odorless

10. STABILITY AND REACTIVITY

STABILITY: Stable at normal temperatures.

CONDITIONS TO AVOID: Excessive heat, shock, friction..

INCOMPATIBILITY (materials to avoid): Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible organic materials, most metals.

HAZARDOUS DECOMPOSITION PRODUCTS: Reaction with organics and strong reducing agents can produce organoselenides and hydrogen selenide. Thermal decomposition may produce selenium, nitrogen, phosphoric and copper oxides.

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: 1530 mg/kg (phosphoric acid); 794 mg/kg (cupric nitrate)

TARGET ORGANS: Eyes, skin, lungs (corrosive), liver, kidney, spleen, blood forming organs.

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

Carcinogenicity: IARC: 3 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 and D010). 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. (Selenious and Phosphoric Acid), 8 / UN3264 / P.G. II

Exceptions: 49CFR 173.154 (Consumer Commodity ORM-D)

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 = 10 lb. (selenious acid); 100 lb. (cupric nitrate); 1000 lb. (nitric acid); 5000 lb. (phosphoric acid)

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: Selenious Acid, Nitric Acid, Cupric Nitrate, Phosphoric Acid

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.

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