OXIDIZER STORAGE CODE YELLOW

Section 1 Identification Page E1 of E2

BENZ MICROSCOPE OPTICS CENTER INC.

Benz Microscope Optics Center, Inc. 17254 W. Pleasant Lake Rd. Manchester, MI 48158 Tel: 734-994-3880 Fax: 734-994-9090 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product LEAD NITRATE

Synonyms Lead Dinitrate

Section 2 Hazards identification

Signal word: DANGER

Pictograms: GHS03 / GHS05 / GHS07 / GHS08 / GHS09

email: benzmicroscope.com

Target organs: Blood, Heart, Kidneys, Endocrine, Immune and Central nervous

systems











GHS Classification:

Oxidizing solid (Category 2) Acute toxicity, Oral (Category 4) Serious eye damage (Category 1)

Acute toxicity, Inhalation (Category 4) Reproductive toxicity (Category 1A)

Specific target organ toxicity - repeated exposure (Category 2)

Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

GHS Label information: Hazard statement(s):

H272: May intensify fire; oxidizer.

H302 + H332: Harmful if swallowed or if inhaled

H318: Causes serious eye damage.

H360: May damage fertility or the unborn child.

H373: May cause damage to organs through prolonged or repeated exposure.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P220: Keep away from clothing and combustible materials.

P221: Take any precaution to avoid mixing with combustibles.

P260: Do not breathe dust.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or

doctor if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313: IF exposed or concerned: Get medical attention.

P370+P378: In case of fire: Use water to extinguish.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / information on ingredients								
Chemical Name		CAS#	%	EINECS					
Lead nitrate		10099-74-8	100%	233-245-9					

Section 4 First aid measures

INGESTION: HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: TOXIC IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Use water. Do not use dry chemicals or foams. CO₂ or Halon[®] may provide limited control

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is a strong oxidizer which releases oxygen on heating. The oxygen will intensify any fire in the immediate surrounding. Contact with easily oxidizable, combustible substance or powdered metals may cause fire or explosion upon ignition from any source. Strong oxidizers may explode when shocked, or if exposed to heat, flame, or friction. Also may act as initiation source for dust or vapor explosions.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage Page E2 of E2

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure controls / personal protection							
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)				
	Lead & inorganic compounds, as Pb	TWA: 0.05 mg/m ³ (A3)	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³				

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Partition coefficient: Data not available

Viscosity: Data not available. Molecular formula: Pb(NO₃)₂

Molecular weight: 331.20

Auto-ignition temperature: Decomposes

Decomposition temperature: 470°C (878°F)

Evaporation rate (= 1): Data not available

Flammability (solid/gas): Data not available.

Vapor pressure (mm Hg): Data not available

Vapor density (Air = 1): Data not available

Relative density (Specific gravity): 4.53

Solubility(ies): 50 g/100g water

Explosion limits: Lower / Upper: Data not available

Respiratory protection: Lead based compounds require the use of a NIOSH type N100 filter.

Section 9 Physical and chemical properties

Appearance: Solid. White granules. **Odor:** No odor.

Odor threshold: Data not available.

pH: Data not available

Section 10

Melting / Freezing point: Data not available

Boiling point: Data not available **Flash point:** Data not available

Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures and heat.

Incompatible materials: Ammonium thiocyanate, powdered carbon, lead hypophosphite.

Hazardous decomposition products: Lead oxides and nitrogen oxides.

Section 11 Toxicological information

Acute toxicity: Data not available
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: (R) Reasonably anticipated to be a human carcinogen. IARC classified: Group 2A: Probably carcinogenic to humans.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CA Prop 65: MWARNING!: This product can expose you to chemicals including Lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

Reproductive toxicity: Data not available

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 2 with respiratory effects.

STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Toxic if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

Skin: Harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes severe eye irritation.

Signs and symptoms of exposure: Lead is a cumulative poison and exposure to even small amounts can raise the body's content to toxic levels. Nitrates entering the body by any route can cause headache, vomiting, dizziness, cyanosis, decreased blood pressure and possible respiratory paralysis. Acute poisoning can lead to muscle weakness, "lead line" on the gums, metallic taste, definite loss of appetite, insomnia, dizziness, high lead levels in the blood and urine with shock, coma and death in extreme cases.

Additional information: RTECS #: OG2100000

Section 12 Ecological information

Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 1.5 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 0.5 - 2.0 mg/l - 48 h

Toxicity to algae: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

Bioaccumulative potential: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport information

UN/NA number: UN1469 Shipping name: Lead nitrate

Hazard class: 5.1, (6.1) Packing group: II Reportable Quantity: 10 lbs (4.54 kg) Marine pollutant: Yes

Exceptions: Limited quantity equal to or less than 0.5 Kg 2020 ERG Guide # 141

Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list

Transmission of the final section in the section in									
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65			
Lead nitrate	Listed	Listed	Not listed	Listed	Not listed	⚠ WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov.			

Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

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