## MATERIAL SAFETY DATA SHEET

### Conforms to OSHA'S Hazard Communication Standard 29 CFR 1910.1200

**Identity:** 

Oxral Electric Match

#### Section I

#### Importer and Distributor's Name and Address:

Luna Tech, Inc. Emergency Telephone: (+1) 813-248-0585, 800-255-3924

148 Moon Dr. **Telephone Number:** (+1)256-725-4224

Owens Cross Roads, AL 35763 Date Prepared: 2004-12-22

## Section II-Hazardous Ingredients/Identity Information

HAZARDOUS COMPONENTS OSHA PEL ACGIH TLV OTHER LIMITS %

Lead Dioxide CAS#1309-60-0 TWA 0.1 mg Pb/m3 ORAL GUINEA PIG

LD50:200mg/kg 35-45% Calcium Silicide CAS#12737-18-7 Not listed

Potassium Perchlorate CAS#7778-74-7 10 mg/m3 ORAL RAT LD50:2100 mg/kg

Antimony Sulfide CAS#1345-04-6 TWA 0.5 mg (Sb)/m3

Lead Picramate Lead compounds TWA 0.1 mg Pb/m3

Nitrocellulose 10 mg/m3

#### SECTION III-PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:N/ASpecific Gravity (H20=1):approx. 4.5Vapor Pressure (mm Hg.):N/AMelting Point:decomposes @ 270 CVapor Density (Air=1):N/AEvaporation Rate (Butyl Acetate=1):N/A

Solubility in Water: Insoluble with varnish coating intact

Appearance and Odor: Dark brown, or yellow match head sealed into white plastic shroud-with red and blue

insulated wire leads.

## Section IV-Fire and Explosion Hazard Data

Flash Point: Flammable Limits LEL UEL lgnites at 270-280 degrees C N/A N/A N/A

Extinguishing Media: Water or Dry Chemical

Special Fire Fighting Procedures: Use respiratory protection when large quantities are involved.

Unusual Fire and Explosion Hazards: When ignited electric matches may throw hot sparks several feet and

cause secondary fires. Matches may be ignited by shock or friction.

### **Section V-Reactivity Data**

Stability: Stable Conditions To Avoid: Heat, sparks, and open flame. Do

not subject match heads to impact or friction. Do not remove the shroud, it is furnished for safety to prevent

premature ignition.

Incompatibility (Materials to Avoid): Acids, Chlorates, Reducing Agents

**Hazardous Decomposition or Byproducts:** Oxides of Nitrogen and lead, Lead Dust **Hazardous Polymerization:** Will not occur **Conditions To Avoid:** 

**Section VI-Health Hazard Data** 

Route(s) of Entry: Inhalation? Skin? Ingestion?

> Not with match head intact No Not with match head intact

Health Hazards (Acute and Chronic): Deliberate inhalation or ingestion of large amounts of crushed match head

composition may cause lead poisoning. Hazard of thermal burns from

accidental ignition is much more significant.

NTP? Carcinogenicity: ARC Monographs? **OSHA Regulated?** 

Nο Nο Nο

Signs and Symptoms of Exposure: Acute lead intake: Abdominal discomfort or pain, nausea, vomiting,

headache, dizziness, weakness, metallic taste, constipation or diarrhea,

anemia, joint and muscle pains.

Medical Conditions Generally Aggravated by Exposure: None Known--smoke from ignited matches may cause

respiratory irritation to highly sensitive individuals

Emergency and first Aid Procedures: Induce vomiting if ingestion has occurred.

# Section VII-Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled: Do not permit open flames or smoking near spill site.

Sweep up broken match heads with non-sparking tools. Avoid inhaling match head dust. Remove other flammable or pyrotechnic materials away from

spill area until cleanup is complete.

Waste Disposal Method: Keep away from heat, sparks, and flames. Keep containers in a cool place. Do not store with other flammable, explosive, or pyrotechnic materials.

Precautions to Be Taken in Handling and Storing: Never remove the protective shroud. It is furnished to

enhance safety. The Oxral match upon ignition expels hot particulate matter, which is very effective for ignition. Dispose in accordance with federal, state and local regulations. Small quantities can be disposed of by open burning if permitted.

#### Section VIII-Control Measures

Respiratory Protection (Specify Type): Not required

Ventilation: Yes Local Exhaust: Acceptable

Mechanical (General): Special:

Other:

Protective Gloves: Not required

Eye Protection: Safety glasses or goggles with side shields

Other Protective Clothing and Equipment:

Work/Hygienic Practices: Do not consume food, drink, or tobacco in areas where they may become contaminated.

All Pyrotechnics should be used and handled with extreme caution, in accordance with all relevant regulations and codes only by experienced professional pyrotechnicians.