

**Humco Holding Group, Inc.**  
**7400 Alumax Drive**  
**Texarkana, TX 75501**  
**903-334-6200**

Item#0395-3501

**Zinc Oxide****DATE ISSUED: 04/10/07**

**SECTION I IDENTIFICATION**

**Product/Trade Name & Synonyms:** Zinc Oxide (French Process)

**NFPA RATING:**

**Health Hazard:** 1  
**Fire Hazard:** 0  
**Reactivity:** 0

**Chemical Formula:** Zinc Oxide

**Formula:** ZnO

**Molecular Wt.** 81.38

**Emergency Telephone Number:** 1-800-424-9300

**SECTION II COMPOSITION/INFORMATION ON INGREDIENTS**

| Material or Component | CAS #     | Wt. %    | Permissible Air Conc. (mg/cu.m.) |           |
|-----------------------|-----------|----------|----------------------------------|-----------|
|                       |           |          | OSHA                             | ACGIH     |
| Zinc Oxide            | 1314-13-2 | 99.7-100 | 5.0 Resp. Dust<br>10. Total Dust | 10.0 dust |
| Lead                  | 7439-92-1 | <0.003   |                                  |           |
| Cadmium               | 7440-43-9 | <0.002   |                                  |           |

**SECTION III HAZARDS IDENTIFICATION**

**Primary routes of Entry:** Ingestion & inhalation

**Carcinogenicity:** Not listed as a carcinogen by IARC, NTP, OSHA.

**Acute Overexposure (Symptoms and Effects)**

1. Metal fume fever with symptoms of fever, chills, metallic taste, chest tightness, or nausea may result from inhalation of zinc oxide fume or dust.
2. Zinc oxide is relative non-toxic by mouth, but may cause fever, nausea, stomach cramps or diarrhea in large doses.
3. Dermatitis (papulopustular eczema) with intense itching may result from excessive skin contact.

**Zinc Oxide**

**Chronic Overexposure (Symptoms & Effects):** None reported.

**Medical Conditions possibly Aggravated:** None reported.

---

**SECTION IV FIRST AID MEASURES**

---

**Inhalation:** Remove from exposure; place individual under care of physician.

**Ingestion:** Induce vomiting in conscious individual and call a physician.

**Skin or Eyes:** Flush with plenty of water. If symptoms develop, consult a physician.

---

**SECTION V FIRE FIGHTING MEASURES**

---

**Flash Point:** NA

**Auto Ignition Temperature:** NA

**Flammable Limits in Air (% by Volume):** NA **Unusual Fire & Explosion Hazards:** NA

**Fire Extinguishing Agents Recommended:** No specific agents recommended.

**Fire Extinguishing Agents to Avoid:** No specific agents.

**Special Fire Fighting Precautions:** Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in fire.

---

**SECTION VI RELEASE MEASURES**

---

**Spills or Leaks:** Any method which keeps dust to a minimum is acceptable. Vacuuming is preferred for dust. Use approved respiratory protection if possibly of dust or fume exists. Do not use compressed air for cleaning.

---

**SECTION VII HANDLING & STORAGE**

---

**Normal Handling:** Use of approved respirator for applications where adequate ventilation cannot be provided. Activities, which generate dust or fume, should be avoided. When melted, the temperature should be kept as low as possible.

**Storage:** General storage procedures acceptable.

---

**SECTION VII**
**EXPOSURE CONTROLS/PERSONAL PROTECTION**


---

**Engineering Controls:** Local exhaust ventilation is recommended for dust and/or fume generating operations where airborne exposures may exceed permissible air concentrations.

**Zinc Oxide**

**Personal Hygiene:** Avoid inhalation or ingestion. Practice good housekeeping and person hygiene procedures. A shower is recommended if significant dust exposure occurs.

**Respiratory Protection:** Where airborne exposures may exceed OSHA/ACGIH permissible air concentrations, the minimum respiratory protection recommended is a negative pressure air purifying respiratory with cartridges that are NIOSH/MSHA approved against dust, fumes and mists having a TWA not less than 0.005 mg/cu.m.

**Eyes & Face:** Safety glasses recommended where the possibility of getting dust particles in eyes exist.

**Other Clothing & Equipment:** Protective clothing is recommended for jobs with heavy dust exposure to prevent skin irritation. Contaminated clothing should be removed before leaving plant premises.

---

**SECTION IX**
**PHYSICAL/CHEMICAL PROPERTIES**


---

|                                                   |                                                       |
|---------------------------------------------------|-------------------------------------------------------|
| <b>Material is (at normal conditions):</b> Solid  | <b>Appearance &amp; Odor:</b> White powder, odorless. |
| <b>Melting Point (°C):</b> Sublimes at 1975       | <b>Boiling Point (°C):</b> NA                         |
| <b>Specific Gravity (H<sub>2</sub>O = 1):</b> 5.6 | <b>Vapor Density (Air = 1):</b> NA                    |
| <b>Solubility in Water (% by Wt.):</b> Insoluble  | <b>pH:</b> NA                                         |
| <b>Vapor Pressure (mm Hg):</b> NA                 | <b>Evaporation Rate:</b> NA                           |

---

**SECTION X**
**STABILITY & REACTIVITY**


---

**Stability:** Stable

**Conditions to Avoid:** NA

**Incompatibility (Materials to Avoid):** Zinc oxide and magnesium can react explosively when heated. Zinc Oxide and chlorinated rubber were mixed and exploded in one instance.

**Hazardous Decomposition Products:** None

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** NA

---

**SECTION XI****TOXICOLOGICAL INFORMATION**

---

**LD50 (Species, Route):** NA

**LC50 (Species):** NA

**Mutagenicity:** NA

---

**SECTION VII****ECOLOGICAL**

---

**Ecotoxicity:** NA

**Environmental Fate:** NA

**Additional Notes Or References:** While Humco Holding Group, Inc. believes the information contained herein to be true and accurate; it has relied on information provided by others. Humco Holding Group, Inc. makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or with respect to the results to be obtained from the use of the product. Humco Holding Group, Inc. disclaims all liability with respect to the use of this product, including without limitation, liability for injury to the user or third persons.