

# CRYSTAL MARK, INC.

A **SWAN** Technologies Corporation  
613 Justin Avenue • Glendale, CA 91201  
Tel: (818)-240-7520 • Fax: (818)-247-3574  
www.crystalmarkinc.com • E-mail: sales@crystalmarkinc.com

## MATERIAL SAFETY DATA SHEET

**Flammability:** 0  
**Health:** 0  
**Reactivity:** 0  
**Hazard:** 0  
**Rating consistent with NFPA code:** 0

### SECTION I - PRODUCT IDENTIFICATION

**Trade Name:** Aluminum Oxide #14 (17.5 microns)

**Date Prepared:** 05-14-09

**Manufacturer's Name:** **CRYSTAL MARK, INC.**

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Glendale, CA 91201

**Phone Number:** (818) 240-7520

### SECTION II – INGREDIENTS

**Chemical Names:** Refractory Oxide (Al<sub>2</sub>O<sub>3</sub>) @ 96.3% Titanium Oxide (TiO<sub>2</sub>) @ 2.8%  
Impurities @ 1.5% (SiO<sub>2</sub> + Fe<sub>2</sub>O<sub>3</sub> + Cao + MgO + Na<sub>2</sub>O + K<sub>2</sub>O)

**CAS Numbers:** 1344-28-1 (Al<sub>2</sub>O<sub>3</sub>), 13463-67-7 (TiO<sub>2</sub>)

### SECTION III - PHYSICAL DATA

**Boiling Point:** NAIF

**Melting Point:** 1900°C

**Specific Gravity:** 3.95

**Vapor Pressure:** NAIF

**Vapor Density:** NAIF

**Evaporation Rate (Butyl Acetate=1):** NAIF

**Solubility in Water:** Insoluble

**Solubility in Alcohol:** Insoluble

**Appearance and Odor:** Granular, gray brown to red brown, no odor

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**Flash Point:** NAIF

**Auto Ignition Temperature:** N/A

**Flammable Limits:** LEL: N/A UEL: N/A

**Extinguishing Media:** N/A

**Special Firefighting Procedures:** None

**Unusual Fire and Explosion Hazards:** None

### SECTION V - HEALTH HAZARD DATA

**Effects of Overexposure [Conditions to Avoid]:**

*Inhaled* - May cause coughing, shortness of breath.

*Exposure Limits in Air-* (ACGIH) TLV 10mg/m<sup>3</sup> (OSHA) PEL: 15mg/m<sup>3</sup>

*Contact with Skin and Eyes* - May irritate eyes

*Absorbed through Skin* - Not absorbed, may cause abrasion.

*Swallowed* - No known adverse effects, ingestion not recommended.

**Health Effects or Risk from Exposure:**

*Acute* - May cause shortness of breath.

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*Chronic* - May affect breathing capacity.

**Emergency and First Aid Procedures:**

*Eye Contact* - Wash with large amount of water, obtain first aid if needed.

*Skin Contact* - Obtain first aid if needed.

*Inhaled* - Remove to fresh air, apply artificial respirator if needed.

*Swallowed* - Obtain first aid if needed.

**Suspected Cancer Agent:** No

**SECTION VI - REACTIVITY DATA**

**Stability:** STABLE

**Conditions to avoid:** NAIF

**Incompatibility (materials to avoid):** NAIF

**Hazardous Polymerization:** Will not occur

**Hazardous Decomposition Products:** NAIF

**SECTION VII - SPILL OR LEAK PROCEDURES**

**Steps to be taken in case material is released or spilled:**

Normal clean up procedures, respirators may be required.

**Waste Disposal Method:** Disposal must be made in accordance to Federal, State and Local Regulations.

**SECTION VIII - SPECIAL PROTECTION INFORMATION**

**Respiratory Protection:** As needed, approved dust respirator, see OSHA 29CFR1910.134

**Ventilation:** Handle with adequate ventilation for nuisance dust.

**Protective Gloves:** As desired

**Eye Protection:** Recommended, see OSHA 29CFR1910.133

**Other Protective Equipment:** NAIF

**Protective Measures During Maintenance of Contaminated Equipment:** See sections VII and VIII

**SECTION IX - TRANSPORTATION REGULATORY REQUIREMENTS**

Not regulated by D.O.T.

**NAIF** = No applicable information found    **N/A** = Not Applicable

*This product safety data sheet is offered solely for your information, consideration and investigation. **CRYSTAL MARK, INC.** provides no warranties, either expresses or implies, and assumes no responsibility for the accuracy or completeness of the data contained herein.*

Reviewed by: Reynaldo Gabon  
Quality Manager

Approved by: Keith Swan  
General Manager