MATERIAL SAFETY DATA SHEET
For Coatings, Resins, and Related Materials

Complies with U.S. Department of Labor Occupational Safety and Health Administration
For OSHA Hazard Communication Standard Specific Requirements Consult: 29 CFR 1910.1200

SECTION I - PRODUCT IDENTIFICATION

Distributor: Sino-American Pigment Systems, Inc.
1620 Norvell Street
El Cerrito, CA 94530, USA

Date of Creation: Jan 20, 1999
Date of Revision: April 22, 2002

Product Identification:

Product Name:		Lithopone [All Grades]
Chemical Family:		Inorganic Pigment
CAS Number:		1345-05-7
Formula:		$ZnS:BaSO_4$
TSCA Status:		XU - Exempt From Reporting
Meets FDA Regulations:		GRAS Material
CFR 21 Section	Part 175	**Indirect Food Additives**
	175.105	Adhesives
	175.300	Resinous and polymeric coatings
	178.3297	Colorants for polymers
	178.3570	Lubricants with food contact
OSHA Hazard Communication Status:		This product is not hazardous as defined by OSHA HC Standard 29 CFR 1910.1200

Emergency Information:
Information Phone: 800 536 9932
Chemtrack Phone: 800 424 9300

SARA Title III Section 313: Zinc Sulfide is present in amounts above the applicable deminimus concentrations for Zinc Compounds as listed in 40 CFR 372.65

CAS #	Chemical Name
1314-98-3	Zinc Sulfide
7727-43-7	Barium Sulfate

Hazardous Materials Identification System Index Rating: Severe-4, Serious-3, Moderate-2, Slight-1, Minimal-0
[**1**] Health [**0**] Flammability [**0**] Reactivity [**E**] Personal Protection

SECTION II - HAZARDOUS IDENTIFICATION

Zinc Sulfide is considered an ***Indirect Food Additive*** as "Lubricants with incidental food contact" Subpart 178.3570 and as a "Colorant for polymers", Subpart 178.3297 of Part CFR, Title 21, Volume 178.
Barium Sulfate has been ***delisted*** from the category of "barium compounds" on the list of toxic chemicals for which reporting is required under Section 313 of the emergency Planning and Community right-to-Know Act of 1986. [Reference: ***Federal Register*** notice of EPA final rule: Page 33208, Volume 59, Number 123, 28 June, 1994, Rules and Regulations].

SECTION III - PHYSICAL DATA

Boiling Point: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Solubility In Water: Insoluble [eg: @ 20^oC - $ZnS \leq 6.9 \times 10^{-3}$ g/l and $BaSO_4 \leq 5.3 \times 10^{-3}$ g/l]
Appearance & Odor: Very Fine Brilliant White and Odorless Powder
Specific Gravity: 4.20
Melting Point: $ZnS:BaSO_4$ Sublimes @ $1{,}185^oC$
Evaporation Rate: N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Classification **OSHA**: N/A **DOT**: 55
Flash Point: Non-Flammable **LEL**: N/A **UEL**: N/A

Extinguishing Media: [ ] Foam [ ] "Alcohol" Foam [ ] CO_2 [ ] Dry Chemical [ ] Water Fog [**X**] Any

Unusual Fire and Explosion Hazards: None, but if involved in fire from other sources, SO_2 vapor may be generated at high temperatures.
Special Fire Fighting Procedures: Fire Fighters should wear self-containing breathing apparatus, as protection against potential acid vapors.

SECTION V - HEALTH HAZARD DATA

Primary Route(s) of Entry:
[ ] Ingestion [ ] Dermal [**X**] Inhalation [**X**] Eye

Threshold Limit Value: None Established

Health Hazards (Acute and Chronic):
Acute: No applicable information found concerning any adverse acute health effects from overexposure to product.
Chronic: Inhalation of airborne particles may cause transient irritation in mouth, nose and throat.

Carcinogenicity:	**NTP**?	**IARC Monographs**?	**OSHA Regulated**?	**SARA Title III**?
FDA GRAS - Inert	Not Listed	Not Listed	Not Regulated	Not Regulated **Barium Sulfate delisted from "Barium Compounds" on TSCA inventory 28 June, 1994.**

Signs and Symptoms of Exposure: N/A

Medical Conditions Generally Aggravated by Exposure: N/A

Emergency and First Aid Procedures:
Eye Contact - Flush thoroughly with water.
Inhalation - Remove to fresh air.
Skin Contact - Wash thoroughly with soap or mild detergent, and water.
Ingestion - If conscious, give large quantities of water to induce vomiting, and call a physician.

SECTION VI - REACTIVITY DATA

Stability: [ ] Unstable [**X**] Stable **Conditions to Avoid**: None in normal use.
Incompatibility (Materials to Avoid): Contact with strong mineral acids.
Hazardous Decomposition Products: None, but contact with strong mineral acids or high temperatures may generate SO_2 and/or H_2S.
Hazardous Polymerization: [ ] May occur [**X**] Will not occur

SECTION VII - SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:
Material will be blown away as dust. Prevent spread of material and keep dust level down. Scoop up material or use vacuum technique. Those involved in the clean-up should use respiratory protection.

Waste Disposal Methods:
As with other pigment powders, disposal must be made in accordance with Federal, State and local regulations.

RCRA Status:
Not Regulated.

SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

Respiratory Protection: Wear NIOSH approved dust respirator.
Ventilation: Provide local exhaust ventilation system to meet TLV requirements.
Protective Gloves: No requirement **Eye Protection**: Goggles advisable against dust.
Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or using tobacco products.

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing:
- Avoid contact with water or strong acids; - Keep storage area dry; - Use ventilation to keep dust level down;
- Use a personal respirator if dust cannot be controlled; - Store away from heat; - Use good hygienic practice.