

## MATERIAL SAFETY DATA SHEET

ZYGLO® DRY POWDER DEVELOPER ZP-4B

### 1. IDENTIFICATION

**Company:** MAGNAFLUX  
**Address:** 3624 West Lake Avenue, Glenview, Illinois 60026  
**Telephone No.:** 847-657-5300 (Off-Hour Emergency Number - CHEMTREC - 1-800-424-9300).  
**Product Use:** Developer for fluorescent penetrants.  
**Packages:** 1 pint can, 10 and 25 lb. boxes.  
**NFPA Rating:** Health 1, Flammability 1, Reactivity 0.  
**PIN (Canada):** None  
**Revision Date:** September 16, 2010

### 2. INGREDIENTS

<u>Ingredient</u>	<u>Wt./Wt. %</u>	<u>CAS #</u>	<u>TLV</u>	<u>PEL</u>	<u>LD<sub>50</sub></u>	<u>LC<sub>50</sub></u>
Pentaerythritol	40-70	115-77-5	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	10 g/kg (oral/rat)	not avail.
Hexamethyldisilazane, silica reaction product	3-7	68909-20-6	10 mg/m <sup>3</sup>	6 mg/m <sup>3</sup>	5mg/kg	not avail.
Aluminum oxide	3-7	1344-28-1	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	not avail.	not avail.

### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**  
 Nuisance dust.

#### POTENTIAL HEALTH EFFECTS

**Skin Contact:** None  
**Eyes:** Gritty material may scratch eyeball  
**Inhalation:** May plug breathing passages  
**Ingestion:** Not significant  
**Medical conditions known to be aggravated by exposure to product:** None

### 4. FIRST AID

**Skin Contact:** None  
**Eyes:** Rinse carefully under upper and lower eyelids using plenty of water.  
**Inhalation:** Remove to fresh air.  
**Ingestion:** None.

**NOTE:** In all severe cases, contact physician immediately. Local telephone operators can furnish number of regional poison control center.

### 5. FIRE HAZARD

**Conditions of flammability:** None  
**Flash point:** None  
**Flammable limits in air:** None  
**Extinguishing media:** None  
**Special fire fighting procedures:** None  
**Hazardous combustion products:** None  
**Unusual fire hazards:** Floating ZP-4B dust can be ignited by high energy arc (350 joules or watt-seconds) or temperatures higher than 383°F (195°C).

### 6. ACCIDENTAL RELEASE MEASURES

Sweep up. (For disposal, see Section 13).

### 7. HANDLING AND STORAGE

Avoid breathing dust.  
Keep dry.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Controls:** None.  
**Personal protection:** Respirator with filter if used in enclosed, unventilated space.

9. **PHYSICAL PROPERTIES**

<i>Initial boiling point (bulk):</i>	None	<i>Vapor pressure:</i>	None
<i>Percent volatile:</i>	None	<i>Vapor density:</i>	Not applicable
<i>Density/sp. gravity:</i>	0.2	<i>Evaporation rate:</i>	None
<i>Water solubility:</i>	4%	<i>Appearance:</i>	Fluffy white dusty powder
<i>pH:</i>	Neutral	<i>Odor:</i>	None

10. **STABILITY AND REACTIVITY**

<i>Stability:</i>	Stable
<i>Incompatibility:</i>	Acids
<i>Hazardous decomposition products:</i>	If heated to combustion temperature, soot, smoke, and oxides of carbon.
<i>Reactivity:</i>	None

11. **TOXICOLOGICAL INFORMATION**

<i>Carcinogenicity:</i>	Contains no known or suspected carcinogens listed with OSHA, IARC, NTP, or ACGIH.
<i>Threshold limit value:</i>	5 mg/m <sup>3</sup> for respirable dust.
<i>WHMIS information (Canada):</i>	According to available information, the ingredients have not been found to show reproductive toxicity, teratogenicity, mutagenicity, skin sensitization, or synergistic toxic effects with other materials.

12. **ECOLOGICAL INFORMATION**

No data is available on ZP-4B.

13. **DISPOSAL**

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. **TRANSPORTATION**

**U.S. DOT: 49 CFR 172.101 Hazardous Materials Table**

<i>Proper shipping name:</i>	None, not restricted
<i>Hazard class or division:</i>	None
<i>Identification No.:</i>	None
<i>Packing Group:</i>	None

15. **REGULATORY INFORMATION**

<i>TSCA:</i>	All ingredients are listed in TSCA inventory.
<i>CERCLA:</i>	Not reportable
<i>SARA TITLE III, Section 313:</i>	Aluminum oxide
<i>California Proposition 65:</i>	Contains nothing on this list
<i>WHMIS Class (Canada):</i>	Not a controlled product.
<b>Note:</b> This MSDS has been prepared to meet WHMIS (Canada) requirements with the exception of using 16 headings.	

16. **OTHER INFORMATION**

<i>Revision Statement:</i>	Section 2, Section 13
<i>Supersedes:</i>	September 6, 2007