

NOTE: This MSDS is a discontinued item. Magnaflux does not update the MSDS for an obsolete product. This MSDS, dated July 31, 1990 is the most recent MSDS available.

# MATERIAL SAFETY DATA SHEET

ZL-22A ZYGLO® Penetrant

**1. IDENTIFICATION**

*Company:* MAGNAFLUX  
*Address:* 3624 West Lake Avenue, Glenview, Illinois 60025  
*Telephone No.:* 847-657-5300 (Off-Hour Emergency Number - CHEMTREC - 1-800-424-9300).  
*Product:* ZL-22A penetrant  
*Packages:* 1 gallon can, 5 gallon pail, 55 gallon drum, 12 fluid ounce can  
*Chemical Family:* Mixture. HMIS Rating: Health 1, Flammability 1, Reactivity 0

**2. HAZARDOUS INGREDIENTS**

Fluoranthene, CAS #206-44-0, TLV: Not established. Under 5%  
 Distillates (Petroleum), catalytic reformer fractionater rresidue, low-boiling, CAS #68477-31-6, TLV: No established. Under 50%  
 Kerosene, CAS #8008-20-6, TLV: 100 mg/m3  
 Carbon dioxide, CAS #124-38-9, TLV: 5000 ppm, (Aerosol only) Under 5%

Contains no other ingredient suspected of being hazardous according to information sources listed in 29 CFR 1910.1200, OSHA Hazard Communication Rule.

**3. PHYSICAL PROPERTIES**

<i>Boiling point:</i>	410°F	<i>Vapor Pressure:</i>	Below 1.0 mm at 100°F
<i>Percent volatile:</i>	2%	<i>Vapor Density:</i>	Over 1.0
<i>Density:</i>	0.97	<i>Evaporation rate:</i>	Negligible
<i>Water solubility:</i>	0	<i>Appearance:</i>	Green liquid
<i>pH</i>	Neutral		

**4. FIRE HAZARD**

*Flash point:* 175°F Pinsky-Martens closed cup  
*Flammable limits in air:* 1% to 6%  
*Extinguishing media:* Carbon dioxide, foam  
*Special fire fighting procedure:* Keep containers cool with water spray. Do not spray water on burning ZL-22A  
*Unusual fire hazards:* Aerosol cans may burst if heated above 130°F.

**5. HEALTH HAZARD**

*Threshold limit value:* Not established  
 ROUTES OF ENTRY, EFFECTS OF OVEREXPOSURE, EMERGENCY AND FIRST AID:  
*Inhalation:* Dizziness, nausea. Remove to fresh air.  
*Skin Contact:* Irritates skin by dissolving skin oils. Wash off promptly with soap and water. Use soothing lotions.  
*Eye Contact:* Irritation. Rinse eyes copiously with water.  
*Carcinogenicity:* Contains no known or suspected carcinogens listed with OSHA, the International Agency for Research on Cancer Monographs, or the National Toxicology Programs Annual Report on Carcinogens.  
*Medical conditions known to be aggravated by exposure to product:* None

**6. REACTIVITY HAZARDS**

*Stability:* Stable  
*Incompatibility:* None  
*Hazardous Decomposition Products:* Oxides of carbon and nitrogen on combustion.

**7. SAFE HANDLING PROCEDURES**

*General:* Avoid frequent or prolonged skin exposure.  
 Do not breathe spray mist.  
 Do not heat aerosol cans above 130°F.  
 Store away from heat sources.

*Personal Protective Equipment:* Nitrile rubber gloves, if hand exposure is unavoidable. Respirator with filter cartridge if spraying in unventilated area.

Respirator with filter cartridge if spraying in unventilated areas.

*Controls:* Preferably spray where ventilation removes vapor from occupied area.

MAGNAFLUX-A DIVISION OF ILLINOIS TOOL WORKS INC.  
 3624 WEST LAKE AVENUE, GLENVIEW, ILLINOIS 60025 PHONE 847.657.5300 FAX 847.657.5388

8. **DISPOSAL**

*Spent Material, Mopped-Up Spills and Leaks:* Incinerate or send to Waste Disposer who can incinerate it.

*Aerosol Can:* Empty out aerosol cans before disposal. Pressurized aerosol cans are not an acceptable waste.

*Process Rinsings:* If local authorities prohibit dumping rinsings down the sewer, purify rinsings with Magnaflux Wastewater Treatment System or equivalent. Call the Wastewater Treatment Group at Magnaflux.

9. **DOT SHIPPING**

*Shipping Name:* For Bulk - Combustible Liquid N.O.S.  
For Aerosol - Compressed Gas N.O.S.

*Marking:* For Bulk - None  
For Aerosol - Nonflammable Gas

*Hazard Class:* For Bulk - Combustible Liquid  
For Aerosol - Nonflammable Gas

*Identification:* For Bulk - NA1993  
For Aerosol - UN1956

10. **CERTIFIED**

ZL-22A is composed entirely of materials listed in the TOSCA Chemical Substance Inventory.

**Date:** July 31, 1990  
Supercedes MSDS date May 28, 1986

By: Bruce C. Graham, Chief Chemist