

MATERIAL SAFETY DATA SHEET

ZYGLO® PENETRANT ZL-60D

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: Fluorescent inspection penetrant
Packages: 1 and 5 gallon pails, 20 and 55 gallon drums, aerosols
NFPA Rating: Health 1, Flammability 1 (aerosol 4), Reactivity 0
PIN (Canada): None
Revision Date: April 16, 2010

2. INGREDIENTS

<u>Ingredient</u>	<u>Wt./Wt.%</u>	<u>CAS#</u>	<u>TLV</u>	<u>PEL</u>	<u>LD₅₀</u>	<u>LC₅₀</u>
White Mineral Oil (petroleum)	15-40	8042-47-5 or 64742-47-8	5 mg/m3	5 mg/m3	Not avail.	Not avail.
Alcohols, C6-10, Ethoxyl	15-40	68987-81-5	Not avail.	Not avail.	Not avail.	Not avail.
Alcohols, C12-15, Ethoxyl	10-30	68551-13-3	Not avail.	Not avail.	1.2 g/kg (oral/rat)	Not avail.
Tri-butoxyethyl phosphate	10-30	78-51-3	Not avail.	Not avail.	3 g/kg (oral/rat)	75mg/l
Secondary Alcohol Ethoxylate	0-20	84133-50-6	Not avail.	Not avail.	8.57 ml/kg (oral/rat)	Not avail.
Liquefied petroleum gasses (propellant, aerosol only)	30	68476-86-8	not avail.	1000 ppm	not avail.	not avail.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Bland oily liquid which may irritate the skin and eyes. Difficult to ignite, but will burn vigorously if engulfed in fire. Aerosol is extremely flammable.

POTENTIAL HEALTH EFFECTS

Skin Contact: Can irritate by removing natural skin oils on long or repeated exposures.
Eyes: Irritating
Inhalation: Not significant. Heated bulk vapors may cause dizziness and nausea.
Ingestion: Not significant in small (mouthful) amounts.
Medical conditions known to be aggravated by exposure to product: None

4. FIRST AID

Skin Contact: Wash off with soap and water. Use soothing lotion.
Eyes: Rinse carefully under upper and lower eyelids using plenty of water.
Inhalation: Remove to fresh air if dizzy or nauseated.
Ingestion: Do not induce vomiting. Accidental ingestion of a small mouthful is not expected to cause significant harm.
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: Bulk: Can ignite if heated above 200°F. Aerosol: Spraying near flames or arcs will ignite the spray mist.
Flash point (Bulk): Minimum 200°F (93°C) (Pensky-Martens closed cup).
Flammable limits in air: 1% to 6%
Extinguishing media: Carbon dioxide, foam.
Special fire fighting procedures: Keep containers cool with water spray. Do not spray water on burning ZL-60D. It will float and spread the fire.
Hazardous combustion products: Smoke, soot, oxides of carbon and nitrogen.
Unusual fire hazards: Aerosol cans may burst if heated above 130°F (54°C) and spray contents into a fire.

6. ACCIDENTAL RELEASE MEASURES

Mop up or sweep up with absorbent. (For disposal, see Section 13.)

7. HANDLING AND STORAGE

Avoid breathing spray mist. Avoid repeated or prolonged skin contact. Avoid eye contact. Store away from heat sources.
 Storage Level 3 Aerosols per NFPA 30B

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Controls: None, unless applied as spray. Use where ventilation will carry spray mist away from occupied areas.
Personal protection: Wear safety glasses to protect eyes. Wear nitrile rubber gloves if hand exposure is unavoidable.
 Respirator with filter if sprayed in enclosed, unventilated space.

9. **PHYSICAL PROPERTIES**

<i>Initial boiling point (bulk):</i>	455° F (235° C) (ASTM D-86)	<i>Vapor pressure:</i>	Bulk: <0.10mm @ 70°F(21°C) Aerosol: 60 psi @ 75°F (24° C)
<i>VOC Content (EPA Method 24):</i>	356 g/L	<i>Vapor density:</i>	Heavier than air
<i>Density/sp. gravity:</i>	0.92	<i>Evaporation rate:</i>	Negligible
<i>Water solubility:</i>	0 (emulsifies into water)	<i>Appearance:</i>	Green, oily liquid
<i>pH:</i>	Neutral	<i>Odor:</i>	Mild odor

10. **STABILITY AND REACTIVITY**

<i>Stability:</i>	Stable
<i>Incompatibility:</i>	None
<i>Hazardous decomposition products:</i>	When burning, soot, carbon and nitrogen oxides.
<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 ³ for oily mist.
<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 ZL-60D. It emulsifies into water and is biodegradable. Its low bulk vapor pressure may exempt it from VOC restrictions. Aerosol propellant is not an ozone depleter.

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

	<u>Non-aerosol</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	None, not restricted	Consumer commodity
<i>Hazard class or division:</i>	None	ORM-D
<i>Identification No.:</i>	None	None
<i>Packing Group:</i>	None	None

IATA: List of Dangerous Goods

	<u>Non-aerosol</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	None, not restricted	Aerosols, flammable
<i>Hazard class or division:</i>	None	2.1
<i>Identification No.:</i>	None	UN1950
<i>Packing Group:</i>	None	-

IMDG: General Index

	<u>Non-aerosol</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	None, not restricted	aerosols
<i>Hazard class or division:</i>	None	2.1
<i>Identification No.:</i>	None	UN1950
<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>	No reportable ingredients
<i>California Proposition 65:</i>	Warning: This material may contain trace amounts of chemicals known to the state of California to cause cancer and/or birth defects and/or reproductive harm.
<i>WHMIS Class (Canada):</i>	Non-Aerosol: D-2B. Aerosol: A, B-5, D-2B

Note: 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 7
<i>Supersedes:</i>	March 29, 2010
<i>Prepared by:</i>	Tamie Simmons, Research Manager