

MATERIAL SAFETY DATA SHEET

ZYGLO® PENETRANT ZL-4C

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 Use: Fluorescent inspection penetrant
Packages: 5 gallon pail
NFPA Rating: Health 1, Flammability 0, Reactivity 0
PIN (Canada): None
Revision Date: September 9, 2010

2. HAZARDOUS INGREDIENTS

<u>Ingredient</u>	<u>Wt./Wt. %</u>	<u>CAS #</u>	<u>TLV</u>	<u>PEL</u>	<u>LD₅₀</u>	<u>LC₅₀</u>
Poly (oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy	15-40	9016-45-9	not avail.	not avail.	2 g/kg (oral/rat)	4.8 mg/L (96hr/Flathead Minnow)
2,2'-oxybis-ethanol	15-40	111-46-6	not avail. 25 ppm	not avail. 25 ppm	1 g/kg (oral/human)	not avail.
2-methyl-2,4-pentanediol	1-5	107-41-5	(ceiling)	(ceiling)	2.8 g/kg (oral/guinea pig)	5 mg/L (Rat)

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
 Bland liquid which may irritate the skin and eyes.

POTENTIAL HEALTH EFFECTS

Skin Contact: Can irritate by removing natural skin oils on long or repeated exposures.
Eyes: Mildly irritating.
Inhalation: Not significant.
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: Not applicable.
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: None
Flash point: None
Flammable limits in air: None
Extinguishing media: None
Special fire fighting procedures: None
Hazardous combustion products: None
Unusual fire hazards: None

6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

Avoid breathing spray mist.

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.



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9. **PHYSICAL PROPERTIES**

<i>Initial boiling point (bulk):</i>	212°F (100°C) (ASTM D-86)	<i>Vapor pressure:</i>	< 25 mm @ 70°F (21°C)
<i>Percent volatile:</i>	65%	<i>Vapor density:</i>	Lighter than air
<i>Density/sp. gravity:</i>	1.03	<i>Evaporation rate:</i>	Like water
<i>Water solubility:</i>	Completely	<i>Appearance:</i>	Clear, green liquid
<i>pH:</i>	Neutral	<i>Odor:</i>	Odorless

10. **STABILITY AND REACTIVITY**

<i>Stability:</i>	Stable
<i>Incompatibility:</i>	None
<i>Hazardous decomposition products:</i>	None
<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>	None for water vapor
<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-4C. It dissolves into water and is biodegradable.

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>
<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>	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>	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 13
<i>Supersedes:</i>	September 6, 2007