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

NFPA Rating: Health 1, Flammability 1 (aerosol 4), Reactivity 0

PIN (Canada): None

Revision Date: October 5, 2012

2. INGREDIENTS

Ingredient	Wt./Wt.%	CAS#	TLV	<u>PEL</u>	<u>LD</u> ₅₀	<u>LC</u> ₅₀
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	30	68476-86-8	not avail.	1000 ppm	not avail.	not avail.
(propellant, aerosol only)						

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.

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 (93.3°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

B. EXPOSURE CONTROLS/PERSONAL PROTECTION

Controls:

None, unless applied as spray. Use where ventilation will carry spray mist away from occupied areas.

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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.

PHYSICAL PROPERTIES



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Initial boiling point (bulk): 455° F (235° C) (ASTM D-86) Vapor pressure:

Appearance:

Odor:

Bulk: <0.10mm @ 70°F(21°C)

Aerosol: 60 psi @ 75°F (24° C)

VOC Content (EPA Method 24): Density/sp. gravity:

356 g/L 0.92

Vapor density: Heavier than air Evaporation rate: Negligible

Water solubility: рН:

0 (emulsifies into water) Neutral

Green, oily liquid

Mild odor

STABILITY AND REACTIVITY 10.

> Stability. Incompatibility:

None When burning, soot, carbon and nitrogen oxides.

Hazardous decomposition products: Reactivity:

None

Stable

TOXICOLOGICAL INFORMATION

Carcinogenicity: Threshold limit value: Contains no known or suspected carcinogens listed with OSHA, IARC, NTP, or ACGIH.

5 mg/m³ for oily mist.

WHMIS information (Canada):

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.

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.

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.

TRANSPORTATION

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

Non-aerosol <u>Aerosol</u>

Proper shipping name: None, not restricted Consumer commodity

Hazard class or division: None ORM-D Identification No.: None None Packing Group: None None

IATA: List of Dangerous Goods

Non-aerosol <u>Aerosol</u>

Proper shipping name: None, not restricted Aerosols, flammable Hazard class or division: None Identification No.: None UN1950

Packing Group: None

IMDG: General Index Non-aerosol <u>Aerosol</u> Proper shipping name: None, not restricted aerosols Hazard class or division: None 2.1 Identification No.: None UN1950

Packing Group: None

REGULATORY INFORMATION

All ingredients are listed in TSCA inventory. TSCA:

CERCLA: Not reportable

SARA TITLE III, Section 313: No reportable ingredients

California Proposition 65. 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.

WHMIS Class (Canada): 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.

OTHER INFORMATION

Revision Statement: Section 1.5 Supersedes: April 16, 2010

