

SECTION 1: IDENTIFICATION

1.1. PRODUCT IDENTIFIER

Product name : ZL-27A
 Product code : Not available

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Use of the substance/mixture : Non-Destructive Testing

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

| | |
|--------------------------|--------------------|
| Manufacturer | Distributor |
| Magnaflux | |
| 155 Harlem Ave. | |
| Glenview, IL 60025 - USA | |
| T: 847-657-5300 | |

1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS classification

Eye Irrit. 2B
 Asp. Tox. 1

2.2. LABEL ELEMENTS

GHS labeling

Hazard pictograms (GHS) :



GHS08

Signal word (GHS) : Danger
 Hazard statements (GHS) : Causes eye irritation. May be fatal if swallowed and enters airways.
 Precautionary statements (GHS) : Wash hands thoroughly after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. OTHER HAZARDS

No additional information available.

2.4. UNKNOWN ACUTE TOXICITY (GHS)

Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCE

Not applicable.

3.2. MIXTURE

| Name | Product identifier | % |
|---|---------------------|-------|
| Petroleum distillates, hydrotreated light | (CAS No) 64742-47-8 | 37.54 |
| Castor oil | (CAS No) 8001-79-4 | 17.56 |
| Hexanedioic acid, diisooctyl ester | (CAS No) 1330-86-5 | 5.62 |
| Triphenyl phosphate | (CAS No) 115-86-6 | 1.84 |
| Coumarin, 7-(diethylamino)-4-methyl- | (CAS No) 91-44-1 | 1.59 |

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

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|---------------------------------------|--|
| First-aid measures after inhalation | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. |
| First-aid measures after skin contact | : If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists. |
| First-aid measures after eye contact | : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention. |
| First-aid measures after ingestion | : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. |

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

| | |
|--------------------------------------|--|
| Symptoms/injuries after inhalation | : May cause respiratory tract irritation. |
| Symptoms/injuries after skin contact | : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. |
| Symptoms/injuries after eye contact | : Causes eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. |
| Symptoms/injuries after ingestion | : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting. |

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

| | |
|--------------------------------|---|
| Suitable extinguishing media | : Water fog. Water spray. Foam. Dry chemical. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use water jet. |

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

| | |
|-------------|---|
| Fire hazard | : Products of combustion may include, and are not limited to: oxides of carbon, oxides of phosphorous, hydrocarbons, fumes. |
|-------------|---|

5.3. ADVICE FOR FIREFIGHTERS

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|--------------------------------|--|
| Protection during firefighting | : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool. |
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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

| | |
|------------------|--|
| General measures | : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. |
|------------------|--|

6.2. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

| | |
|-------------------------|---|
| For containment | : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). |
| Methods for cleaning up | : Scoop up material and place in a disposal container. Provide ventilation. |

6.3. REFERENCE TO OTHER SECTIONS

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

| | |
|-------------------------------|--|
| Precautions for safe handling | : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. |
| Hygiene measures | : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking. |

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

| | |
|--------------------|---|
| Storage conditions | : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. |
|--------------------|---|

7.3. SPECIFIC END USE(S)

Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1. CONTROL PARAMETERS

| Petroleum distillates, hydrotreated light (64742-47-8) | | |
|--|--------------------------------------|---|
| ACGIH | ACGIH RCP-TWA (mg/m ³) | 1200 mg/m ³ (143 ppm) (vapor - total hydrocarbons; supplier exposure limits) |
| OSHA | Not applicable | |
| Castor oil (8001-79-4) | | |
| ACGIH | Not applicable. | |
| OSHA | Not applicable. | |
| Hexanedioic acid, diisooctyl ester (1330-86-5) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 5 mg/m ³ (supplier exposure limits) |
| OSHA | Not applicable. | |
| Triphenyl phosphate (115-86-6) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 3 mg/m ³ |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 3 mg/m ³ |
| USA - IDLH | US IDLH (mg/m ³) | 1000 mg/m ³ |
| USA - NIOSH | NIOSH REL (TWA) (mg/m ³) | 3 mg/m ³ |
| Coumarin, 7-(diethylamino)-4-methyl- (91-44-1) | | |
| ACGIH | Not applicable. | |
| OSHA | Not applicable. | |

8.2. EXPOSURE CONTROLS

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. |
| Hand protection | : Wear chemically resistant protective gloves. |
| Eye protection | : Safety glasses or goggles are recommended when using product. |
| Skin and body protection | : Wear suitable protective clothing. |
| Respiratory protection | : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |
| Environmental exposure controls | : Maintain levels below Community environmental protection thresholds. |
| Other information | : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---------------------|
| Physical state | : Liquid |
| Appearance | : Oily |
| Color | : Green |
| Odor | : Mild oily |
| Odor threshold | : No data available |
| pH | : Neutral |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 200 °F (>93 °C) |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not flammable |
| Explosion limits | : No data available |
| Explosive properties | : No data available |

| | |
|--|----------------------|
| Oxidizing properties | : No data available |
| Vapor pressure | : No data available |
| Relative density | : 0.927 |
| Relative vapor density at 20 °C | : No data available |
| Solubility | : No data available. |
| Partition coefficient: n-octanol/water | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : 8.68 - 10.6 cSt |
| Viscosity, dynamic | : No data available |

9.2. OTHER INFORMATION

| | |
|-------------|-----------|
| VOC content | : 176 g/l |
|-------------|-----------|

SECTION 10: STABILITY AND REACTIVITY
10.1. REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2. CHEMICAL STABILITY

Stable under normal storage conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials.

10.5. INCOMPATIBLE MATERIALS

Strong oxidizing agents. Strong acids. Strong alkalis.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon, oxides of phosphorous, hydrocarbons, fumes.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

| | |
|----------------|------------------|
| Acute toxicity | : Not classified |
|----------------|------------------|

| ZL-27A | |
|--|--------------------------------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat | No data available |
| Petroleum distillates, hydrotreated light (64742-47-8) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 5000 mg/kg |
| LC50 inhalation rat | > 5000 mg/m ³ /4h (vapor) |
| Hexanedioic acid, diisooctyl ester (1330-86-5) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 5000 mg/kg |
| LC50 inhalation rat | >3.2 mg/l/4h (aerosol) |
| Triphenyl phosphate (115-86-6) | |
| LD50 oral rat | 3500 mg/kg |
| LD50 dermal rabbit | > 10000 mg/kg |
| Coumarin, 7-(diethylamino)-4-methyl- (91-44-1) | |
| LD50 oral rat | 5000 mg/kg |

| | |
|-------------------------------|---|
| Skin corrosion/irritation | : Based on available data, the classification criteria are not met. |
| Serious eye damage/irritation | : Causes eye irritation. |

| | |
|--|--|
| Respiratory or skin sensitization | : Based on available data, the classification criteria are not met. |
| Germ cell mutagenicity | : Based on available data, the classification criteria are not met. |
| Carcinogenicity | : Based on available data, the classification criteria are not met. |
| Reproductive toxicity | : Based on available data, the classification criteria are not met. |
| Specific target organ toxicity (single exposure) | : Based on available data, the classification criteria are not met. |
| Specific target organ toxicity (repeated exposure) | : Based on available data, the classification criteria are not met. |
| Aspiration hazard | : May be fatal if swallowed and enters airways. |
| Symptoms/injuries after inhalation | : May cause respiratory tract irritation. |
| Symptoms/injuries after skin contact | : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. |
| Symptoms/injuries after eye contact | : Causes eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. |
| Symptoms/injuries after ingestion | : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting. |

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. PERSISTENCE AND DEGRADABILITY

| ZL-27A | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

12.3. BIOACCUMULATIVE POTENTIAL

| ZL-27A | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

12.4. MOBILITY IN SOIL

No additional information available.

12.5. OTHER ADVERSE EFFECTS

Effect on the global warming : No known effects from this product.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

| | |
|----------------|-----------------|
| DOT (bulk) | : Not regulated |
| DOT (non-bulk) | : Not regulated |
| TDG | : Not regulated |
| IATA | : Not regulated |
| IMDG | : Not regulated |

ADDITIONAL INFORMATION

| | |
|-------------------------------|---|
| Other information | : No supplementary information available. |
| Special transport precautions | : Do not handle until all safety precautions have been read and understood. |

SECTION 15: REGULATORY INFORMATION

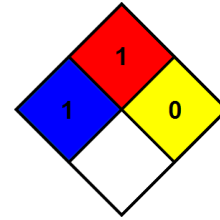
15.1. FEDERAL REGULATIONS

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

NFPA health hazard : 1
NFPA fire hazard : 1
NFPA reactivity : 0



15.3. US STATE REGULATIONS

ZL-27A

| | |
|----------------------------|--|
| State or local regulations | This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. |
|----------------------------|--|

SECTION 16: OTHER INFORMATION

Date of issue : 06/02/2016
Revision date : 06/02/2021
Other information : None.

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