

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

Date of issue: 09/16/2016      Revision date: 05/22/2018      Version: 1.1

## SECTION 1: IDENTIFICATION

### 1.1. PRODUCT IDENTIFIER

Product name : ZE-4E  
 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

<b>Manufacturer</b>	<b>Distributor</b>
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

Skin Irrit. 2  
 Eye Dam. 1

### 2.2. LABEL ELEMENTS

#### GHS labelling

Hazard pictograms (GHS) :



GHS05

Signal word (GHS) : Danger  
 Hazard statements (GHS) : Causes skin irritation. Causes serious eye damage.  
 Precautionary statements (GHS) : Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

### 2.3. OTHER HAZARDS

No additional information available

### 2.4. UNKNOWN ACUTE TOXICITY (GHS)

Not applicable

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. SUBSTANCES

Not applicable

### 3.2. MIXTURES

Name	Product identifier	%
Alcohols, C12-14-secondary, ethoxylated	(CAS No) 84133-50-6	11.94
.alpha.-Terpineol	(CAS No) 98-55-5	10.00
Alcohols, C12-15, ethoxylated propoxylated	(CAS No) 68551-13-3	5.67
9-Octadecenamide, N-(2-hydroxypropyl)-, (Z)-	(CAS No) 111-05-7	2.40
Alcohols, C10-14, ethoxylated	(CAS No) 66455-15-0	1.66
Ethoxylated lauryl alcohol	(CAS No) 9002-92-0	1.60

## SECTION 4: FIRST AID MEASURES

### 4.1. DESCRIPTION OF FIRST AID MEASURES

- 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 : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and 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. Get medical attention immediately.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

### 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 : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
- Symptoms/injuries after ingestion : May be harmful if swallowed. 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 : Carbon dioxide. Foam.
- 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.

### 5.3. ADVICE FOR FIREFIGHTERS

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## 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. Avoid contact with skin and eyes.

### 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/vapours/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.

### 7.3. SPECIFIC END USE(S)

Not available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. CONTROL PARAMETERS

Alcohols, C12-14-secondary, ethoxylated (84133-50-6)	
ACGIH	Not applicable
OSHA	Not applicable
.alpha.-Terpineol (98-55-5)	
ACGIH	Not applicable
OSHA	Not applicable
Alcohols, C12-15, ethoxylated propoxylated (68551-13-3)	
ACGIH	Not applicable
OSHA	Not applicable
9-Octadecenamide, N-(2-hydroxypropyl)-, (Z)- (111-05-7)	
ACGIH	Not applicable
OSHA	Not applicable
Alcohols, C10-14, ethoxylated (66455-15-0)	
ACGIH	Not applicable
OSHA	Not applicable
Ethoxylated lauryl alcohol (9002-92-0)	
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	: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
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	: Viscous
Colour	: Pink
Odour	: Pine
Odour threshold	: No data available
pH	: Neutral
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93.3 °C (> 200 °F)
Relative evaporation rate (butylacetate=1)	: No data available

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Flammability (solid, gas)	: Not flammable
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: 0.93
Relative vapour 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	: ≈ 21 cSt
Viscosity, dynamic	: No data available

**9.2. OTHER INFORMATION**

VOC content : 221 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 acids. Strong bases. Strong oxidizers. Alkalis.

**10.6. HAZARDOUS DECOMPOSITION PRODUCTS**

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

**SECTION 11: TOXICOLOGICAL INFORMATION**
**11.1. INFORMATION ON TOXICOLOGICAL EFFECTS**

Acute toxicity : Not classified.

ZE-4E	
LD50 oral rat	> 2000 mg/kg (Calculated Acute Toxicity Estimate)
LD50 dermal rabbit	No data available
LC50 inhalation rat	No data available
Alcohols, C12-14-secondary, ethoxylated (84133-50-6)	
LD50 oral rat	2100 mg/kg
.alpha.-Terpineol (98-55-5)	
LD50 oral rat	5170 mg/kg
Alcohols, C12-15, ethoxylated propoxylated (68551-13-3)	
LD50 oral rat	1350 mg/kg
LD50 dermal rat	2000 mg/kg
Ethoxylated lauryl alcohol (9002-92-0)	
LD50 oral rat	1600 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: 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	: Based on available data, the classification criteria are not met
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. 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**

ZE-4E	
Persistence and degradability	Not established.

**12.3. BIOACCUMULATIVE POTENTIAL**

ZE-4E	
Bioaccumulative potential	Not established.

**12.4. MOBILITY IN SOIL**

No additional information available

**12.5. OTHER ADVERSE EFFECTS**

Effect on 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)	: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Alcohol, C6-17 (secondary) poly (3-6) Ethoxylate), 9, III, Marine Pollutant
DOT (non-bulk)	: Not Regulated <119 gallons
TDG	: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Alcohol, C6-17 (secondary) poly (3-6) Ethoxylate), 9, III, Marine Pollutant
IATA	: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Alcohol, C6-17 (secondary) poly (3-6) Ethoxylate), 9, III, Marine Pollutant
IMDG	: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Alcohol, C6-17 (secondary) poly (3-6) Ethoxylate), 9, III, Marine Pollutant

**ADDITIONAL INFORMATION**

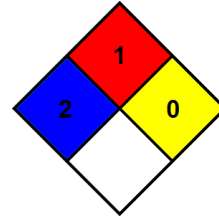
Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

**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.

NFPA health hazard : 2  
NFPA fire hazard : 1  
NFPA reactivity : 0

**15.2. US STATE REGULATIONS****ZE-4E**

State or local regulations

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**SECTION 16: OTHER INFORMATION**

Date of issue : 09/16/2016  
Revision date : 05/22/2018  
Other information : None.

*Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.*