

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

Date of issue: 09/29/2016

Revision date: 07/12/2021

Version: 1.1

## SECTION 1: IDENTIFICATION

### 1.1. PRODUCT IDENTIFIER

Product name : ZP-11

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

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

#### Distributor

### 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

Flam. Liq. 2

Eye Irrit. 2A

STOT SE 3

### 2.2. LABEL ELEMENTS

#### GHS labeling

Hazard pictograms (GHS) :



GHS02

GHS07

Signal word (GHS) :

: Danger

Hazard statements (GHS) :

: Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statements (GHS) :

: Keep away from heat/sparks/open flames/hot surfaces.— No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/eye protection/face protection. Wash hands thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Store in a well-ventilated place. Keep cool. 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. SUBSTANCES

Not applicable

### 3.2. MIXTURES

Name	Product identifier	%
Isopropyl alcohol	(CAS No) 67-63-0	87.52
Pentaerythritol	(CAS No) 115-77-5	12.48

## SECTION 4: FIRST AID MEASURES

### 4.1. DESCRIPTION OF FIRST AID MEASURES

- First-aid measures after inhalation : If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician 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. If irritation persists, get medical attention.
- 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. May cause drowsiness or dizziness.
- 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 serious 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 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 : Water spray, water fog, dry chemical, carbon dioxide, foam.
- Unsuitable extinguishing media : Do not use water jet.

### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- Fire hazard : Highly flammable liquid and vapor. Products of combustion may include, and are not limited to: oxides of carbon. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back.
- Explosion hazard : May form flammable/explosive vapor-air mixture. Dried product is a combustible solid and may form combustible dust.

### 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). Use water spray to keep fire-exposed containers cool.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- General measures : Eliminate sources of ignition. Use special care to avoid static electric charges. 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 : Stop leak, if possible without risk. Move containers from spill area. Use only non-sparking tools. Use explosion-proof equipment. Avoid dust formation. 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

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

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

Precautions for safe handling	: Keep away from sources of ignition - No smoking. 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. Take precautionary measures against static discharge. Use only non-sparking tools. Use explosion-proof equipment. Do not allow solid residues to accumulate. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
<b>7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES</b>	
Technical measures	: Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	: Keep locked up and out of reach of children. Keep container tightly closed. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatibles.

**7.3. SPECIFIC END USE(S)**

Not available.

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

Isopropyl alcohol (67-63-0)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	400 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	400 ppm
USA - IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
USA - NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
USA - NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
USA - NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	1225 mg/m <sup>3</sup>
USA - NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
Pentaerythritol (115-77-5)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (total dust)
		5 mg/m <sup>3</sup> (respirable fraction)
USA - NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust)
		5 mg/m <sup>3</sup> (respirable dust)

**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 with side-shields.
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	: White liquid
Color	: White
Odor	: Alcohol

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

Odor threshold	: No data available
pH	: Neutral
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 82°C (180°F)
Flash point	: 12°C (54°F)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Flammable
Explosive limits	: Lower: 2% Upper: 13%
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: 0.86
Relative vapor density at 20 °C	: 2.1
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	: No data available
Viscosity, dynamic	: No data available

## 9.2. OTHER INFORMATION

No additional information available

## 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. May form flammable/explosive vapor-air mixture.

### 10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

### 10.4. CONDITIONS TO AVOID

Heat. Incompatible materials. Ignition sources. Avoid dust formation.

### 10.5. INCOMPATIBLE MATERIALS

Aldehydes, amines, strong oxidizers, caustics, chlorinated hydrocarbons.

### 10.6. HAZARDOUS DECOMPOSITION PRODUCTS

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

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity : Not classified

ZP-11	
LD50 oral rat	> 2000 mg/kg (Calculated acute toxicity estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated acute toxicity estimate)
LC50 inhalation rat	> 20 mg/l/4h (Calculated acute toxicity estimate)
Isopropyl alcohol (67-63-0)	
LD50 oral rat	5840 mg/kg
LD50 dermal rabbit	13900 mg/kg
LC50 inhalation rat	> 25000 mg/m³/6h

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

<b>Pentaerythritol (115-77-5)</b>	
LD50 oral rat	19500 mg/kg
LD50 dermal rabbit	>10000 mg/kg

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

<b>Isopropyl alcohol (67-63-0)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity	: Based on available data, the classification criteria are not met.
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-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. May cause drowsiness or dizziness.
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 serious 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 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

<b>ZP-11</b>	
Persistence and degradability	Not established.

### 12.3. BIOACCUMULATIVE POTENTIAL

<b>ZP-11</b>	
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.
Additional information	: Handle empty containers with care because residual vapors are flammable.

## SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

DOT (non-bulk)	: Not regulated < 119 gallons
DOT (bulk)	UN1219, Isopropanol Mixture, 3, II
TDG	: UN1219, Isopropanol Mixture, 3, II
IATA	: Prohibited
IMDG	: UN1219, Isopropanol Mixture, 3, II

### ADDITIONAL INFORMATION

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

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

## 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.

#### Isopropyl alcohol (67-63-0)

Subject to reporting requirements of United States SARA Section 313

EPA TSCA Regulatory Flag

T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA

SARA Section 313 - Emission Reporting

1.0 % (only if manufactured by the strong acid process, no supplier notification)

#### Pentaerythritol (115-77-5)

EPA TSCA Regulatory Flag

Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule

NFPA health hazard

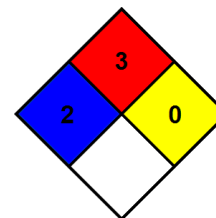
: 2

NFPA fire hazard

: 3

NFPA reactivity

: 0



### 15.3. US STATE REGULATIONS

#### ZP-11

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

: 09/29/2016

Revision date

: 07/12/2021

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.*