

**1 - Product and Company Identification**

**Product name:** Phosphetal 2-EH-2

**Product type/usage/industry:** Phosphated alcohol/Emulsifier

**Manufacturer/Supplier Information:** Zschimmer and Schwarz, Inc.  
70 GA Hwy. 22 W  
Milledgeville, GA 31061  
Phone: (478) 454-1942

**Emergency contact:** **Company:** (478) 454-1942  
**CHEMTREC (24HR):** (800) 424-9300

**2 – Hazards Identification**

**Classification of the substance or mixture:** Classification of this substance/mixture is based on  
**29 CFR 1910.1200/HazCom 2012 (GHS-US)**

Serious Eye Damage/Irritation	Category 1	H318	Causes serious eye damage
Skin Corrosion/Irritation	Category 2	H315	Causes skin irritation

**Labelling:**

**Signal Word:**

**DANGER!**

**Hazard Symbols:**



**Precautionary Statements:**

P264: Wash thoroughly after handling.  
P280: Wear protective gloves/eye protection/face protection.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.  
P310: Immediately call a POISON CENTER/doctor.  
P302+352: IF ON SKIN: Wash with plenty of soap and water.  
P332+313: If skin irritation occurs: Get medical advice/attention.  
P362+364: Take off contaminated clothing and wash it before reuse.

**Key to Hazard Categories:**

1=Severe Hazard      2=Serious Hazard      3=Moderate Hazard      4=Slight Hazard      5=Minimal Hazard

**3 – Composition/Information on Ingredients**

<u>CAS Number</u>	<u>Material or component</u>	<u>Avg % weight</u>
68439-39-4	Poly(oxy-1,2-ethanediyl), alpha-(2-ethylhexyl)-omega-hydroxy-, phosphate	84 – 95%
26468-86-0	Poly(oxy-1,2-ethanediyl), alpha-(2-ethylhexyl)-omega-hydroxy-	5 – 15%
7664-38-2	Phosphoric acid	< 1%

This is not intended to be a complete compositional disclosure. Information provided pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200/ HazCom 2012). See Section 8 for Exposure Limits, if any.

#### 4 - First Aid Measures

<b>Eyes:</b>	Rinse cautiously with water for several (15) minutes. Remove contact lenses if present and easy to do – continue rinsing. Get immediate medical advice/attention.
<b>Skin:</b>	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation develops or persists, get medical advice/attention.
<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
<b>Ingestion:</b>	Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician.

#### 5 - Firefighting Measures

<b>Extinguishing Media:</b>	Water spray, dry chemical, alcohol foam, or carbon dioxide.
<b>Unsuitable Extinguishing Media:</b>	Water jet.
<b>Special Protective Equipment for Firefighters:</b>	Self-contained breathing apparatus and protective clothing when fighting any chemical fire.
<b>Unusual Fire &amp; Explosion Hazards:</b>	In case of fire, containers may explode from internal pressure. Cool with water. May emit toxic fumes of CO <sub>x</sub> and PO <sub>x</sub> under fire conditions.

#### 6 - Accidental Release Measures

<b>Personal precautions:</b>	Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Keep away from heat and sources of ignition.
<b>Environmental precautions:</b>	P273: Avoid release to the environment Limit leakage with earth or sand. Do not discharge into the drains/surface water/groundwater. Dispose of absorbed material in accordance with local, state and federal regulations.
<b>Methods for Containment/Cleaning Up:</b>	Use neutralizing agent. Take up with absorbent material (e.g. vermiculite, general purpose binder). Dispose of absorbed material in accordance with local, state, and federal regulations.

#### 7 - Handling and Storage

<b>Handling:</b>	P261: Avoid breathing mists/vapors of product P262: Do not get in eyes, on skin, or on clothing P264: Wash thoroughly after handling P280: Wear protective gloves/eye protection/face protection
<b>Storage:</b>	P402+404: Store in a dry place. Store in a closed container P403+233: Store in a well ventilated place. Keep container tightly closed.
<b>Special Packaging Requirements:</b>	P406: Store in a corrosive resistant container with a resistant inner liner. Do not store in light metal containers.
<b>Incompatible Materials or Fire/Explosion Protection:</b>	Oxidizers, reducers, alkaline materials, light metals.

**8 - Exposure Controls/Personal Protection**

**Personal Protective Equipment (PPE):**

**Hand Protection:** Use impervious gloves.  
**Eye Protection:** Wear safety glasses with side shields or full face shield.  
**Skin Protection:** Wear protective clothing.  
**Respiratory Protection:** Recommended if ventilation is limited.

**Engineering Measures/Controls:**

**Ventilation:** Ensure adequate ventilation to maintain product at acceptable airborne levels.  
**Other measures:** Eye-wash station.

**Exposure Limits/Guidelines:**

Material	CAS #	BASIS	TYPE	VALUE
Phosphoric acid	7664-38-2	ACGIH	TWA	1 mg/m3
		OSHA	TWA	1 mg/m3

**9 - Physical and Chemical Properties**

<b>Form and Appearance:</b>	Clear to hazy, light yellow to amber liquid	<b>Odor:</b>	Characteristic
<b>pH:</b>	< 2 @ 1%	<b>Odor Threshold:</b>	N/D
<b>Boiling Point:</b>	>212°F (100°C)	<b>Melting/Freezing point:</b>	N/D
<b>Vapor Pressure:</b>	N/D	<b>Vapor Density (Air=1):</b>	N/D
<b>Flash Point:</b>	>200°F (93.9°C)	<b>Evaporation Rate:</b>	N/D
<b>UEL:</b>	N/D	<b>LEL:</b>	N/D
<b>Viscosity:</b>	N/D	<b>Solubility in Water:</b>	Dispersible
<b>Octanol/Water Partition Coefficient:</b>	N/A	<b>Specific Gravity/ Bulk Density:</b>	~1.05
<b>Auto-ignition temperature:</b>	N/D	<b>Decomposition Temperature:</b>	N/D
<b>Volatile content:</b>	N/D	<b>VOC Data:</b>	N/D

**10 - Stability and Reactivity**

**Chemical Stability:** Product is stable under ordinary conditions of use and storage.

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** Extreme temperatures, ignition sources, contact with light metals.

**Incompatible Materials:** Strong oxidizers, acids, alkaline materials, light metals.

**Hazardous Decomposition Products:** Extremely high temperatures and fire conditions may produce CO<sub>x</sub> and PO<sub>x</sub>.

**11 - Toxicological Information**

**Acute Data:**

**Principle Routes of Exposure:** Eye contact, skin contact, ingestion, inhalation (mist).

**Acute Toxicity**

Route of exposure:	Test type:	Species:	Results:	Comments:
Oral	LD50	Rat	>2000 mg/kg (ATE mix)	H303: May be harmful if swallowed
Dermal	LD50	Rabbit	>2000 mg/kg (ATE mix)	-

**Irritation and Corrosion**

Target organ:	Species:	Results:	Comments:
Eyes	Rabbit	Severely irritating	Irreversible eye damage possible
Skin	Rabbit	Irritating	-

**Sensitization**

Target organ:	Species:	Results:	Comments:
Skin	Human	No effects known	-

**Specific Target Organ Toxicity – Single Exposure**

Target organ:	Species:	Results:	Comments:
None known			-

**Chronic Data:**

**Carcinogenicity**

IARC	NTP	ACGIH	OSHA
No	No	No	No

**Mutagenicity:** NDA

**Reproductive Effects:** NDA

**Target Organ Effects:** NDA

**12 - Ecological Information**

**Acute Aquatic Toxicity**

<b>Species:</b>	<b>Test type:</b>	<b>Exposure time:</b>	<b>Results:</b>	<b>Comments:</b>
Rainbow trout	LC50	96h	NDA	Not expected to be acutely toxic to aquatic organisms
Daphnia magna	EC50	48h	NDA	-
Algae	EC50	72h	NDA	-

**Environmental Fate**

<b>Persistence/Degradability:</b>	This product is inherently biodegradable.
<b>COD/BOD5:</b>	NDA
<b>Bioaccumulation Potential:</b>	Not expected to bioaccumulate.
<b>Mobility in Soil:</b>	NDA
<b>Other Adverse Effects:</b>	NDA

**13 - Disposal Considerations**

<b>Product:</b>	Dispose of absorbed material/content and/or container in accordance with local, state, federal and/or international regulations.
<b>Packaging:</b>	NDA

**14 - Transport Regulations**

**US DOT Regulations (Land Transport):**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(phosphate, alkoxy lated, free acid)  
**Hazard Class:** 8  
**UN Number:** UN3265  
**Packing Group:** III  
**Label Required:** CORROSIVE  
**Other Information:** -

**IATA/ICAO Regulations (Air Transport):**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(phosphate, alkoxy lated, free acid)  
**Hazard Class:** 8  
**UN Number:** UN3265  
**Packing Group:** III  
**Label Required:** CORROSIVE  
**Other Information:** -

**IMDG/IMO Regulations (Maritime Transport):**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(phosphate, alkoxy lated, free acid)  
**Hazard Class:** 8  
**UN Number:** UN3265  
**Packing Group:** III  
**Label Required:** CORROSIVE  
**EMS Number:** F-A,S-B  
**Segregation Groups:** Acids  
**Marine Pollutant (Y/N):** N  
**Other Information:** -

**15 - Regulatory Information**

**Domestic Regulations**

**Components requiring notification**

SARA 302 (TPQ)	SARA 304 (RQ)	SARA 313	CERCLA (RQ)	CAA 112(b) HAPS	CAA 112(r)
None	None	None	Phosphoric acid - 7664-38-2 (5000 lbs)	None	None

**SARA 311/312 Hazard Categorization:**

Acute Health Hazard

**State Information**

**California Proposition 65:**

May contain the following components known to the State of California to cause cancer, birth defects, or other reproductive harm.

None.

**State Right to Know/  
Hazardous Substance List  
Information:**

The following chemicals are present on one or more Right to Know/Hazardous Substance Lists for the states of MA, MN, NJ, PA and RI.

Phosphoric acid (7664-38-2)

This is not an exhaustive list. For information on listings in other states, please consult that state's RTK/HSL.

**Chemical Inventories**

United States (TSCA)	EUROPE (EINECS/ELINCS/NLP)	Australia (AICS)	Philippines (PICCS)	Canada		Korea (ECL)	Japan (ENCS/ISHL)	China (IECSC)	New Zealand (NZIoC)
				DSL	NDSL				
Yes	Yes	Yes	NDA	No	Yes	No	NDA	Yes	Yes

**16 - Additional Information**

**Key to Abbreviations:**

NDA - No data available    N/D - Not determined    N/A - Not applicable    N/E - Not established

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