

**1 - Product and Company Identification**

**Product name:** Phosphetal TEA 80

**Product type/usage/industry:** Organic phosphate ester solution

**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)**

|                           |             |      |   |
|---------------------------|-------------|------|---|
| Skin Corrosion/Irritation | Category 1B | H314 | Causes severe skin burns and eye damage |
| Corrosive to Metals       | Category 1  | H290 | May be corrosive to metals              |

**Labelling:**

**Signal Word:**

**DANGER!**

**Hazard Symbols:**



**Precautionary Statements:**

P234: Keep only in original container.  
P260: Do not breathe dusts/mists.  
P264: Wash thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P363: Wash contaminated clothing before reuse.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.  
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P310: Immediately call a POISON CENTER/doctor.  
P390: Absorb spillage to prevent material damage.  
P405: Store locked up.  
P406: Store in a corrosive resistant container with a resistant inner liner.  
P501: Dispose of contents/container in accordance with local, state, and federal regulations.

**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> |
|-------------------|---|---------------------|
| 68131-71-5        | Polyphosphoric acids, esters with triethanolamine | 70 – 80%            |
| 7664-38-2         | Phosphoric acid                                   | < 10%               |

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. Get immediate 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. Immediately 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> , NO <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. Wear protective gloves/protective clothing/eye protection/face protection. |
| <b>Environmental precautions:</b>           | P273: Avoid release to the environment<br>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<br>P262: Do not get in eyes, on skin, or on clothing<br>P264: Wash thoroughly after handling<br>P280: Wear protective gloves/protective clothing/eye protection/face protection |
| <b>Storage:</b>   | P402+404: Store in a dry place. Store in a closed container<br>P403+233: Store in a well ventilated place. Keep container tightly closed. Protect from frost. Store between 32°F (0°C) and 95°F (35°C).                       |
| <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, 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>                         | >212°F (100°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>                | Soluble        |
| <b>Octanol/Water Partition Coefficient:</b> | N/A                           | <b>Specific Gravity/<br/>Bulk Density:</b> | ~1.48          |
| <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>, NO<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 | H303: May be harmful if swallowed – will cause burns to the mouth, throat, and GI tract |

**Irritation and Corrosion**

| Target organ: | Species: | Results:            | Comments:                        |
|---------------|----------|---------------------|----------------------------------|
| Eyes          | Rabbit   | Severely irritating | Irreversible eye damage possible |
| Skin          | Rabbit   | Serious irritation  | Skin burns possible              |

**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**

| Species:      | Test type: | Exposure time: | Results: | Comments: |
|---------------|------------|----------------|----------|-----------|
| Rainbow trout | LC50       | 96h            | NDA      | -         |

**Environmental Fate**

|                            |     |
|----------------------------|-----|
| Persistence/Degradability: | NDA |
| COD/BOD5:                  | NDA |
| Bioaccumulation Potential: | NDA |
| Mobility in Soil:          | NDA |
| Other Adverse Effects:     | 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 ester)  
**Hazard Class:** 8  
**UN Number:** UN3265  
**Packing Group:** II  
**Label Required:** CORROSIVE  
**Other Information:** -

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

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Phosphate ester)  
**Hazard Class:** 8  
**UN Number:** UN3265  
**Packing Group:** II  
**Label Required:** CORROSIVE  
**Other Information:** -

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

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Phosphate ester)  
**Hazard Class:** 8  
**UN Number:** UN3265  
**Packing Group:** II  
**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 -<br>7664-38-2<br>(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                        | No               | NDA                 | Yes    | No   | 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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