

Diphenyl 2-Ethylhexyl Phosphite MSDS

1. Product Name and Identification

- **Product Name:** [Diphenyl 2-Ethylhexyl Phosphite](#)
- **Chemical Formula:** C₂₂H₃₁O₃P
- **CAS Number:** 1241-94-7
- **Synonyms:** Phosphorous acid, diphenyl 2-ethylhexyl ester
- **Product Use:** Antioxidant, industrial stabilizer
- **Manufacturer Information:**
 - Company Name: [Insert Manufacturer's Name Here]
 - Address: [Insert Address Here]
 - Emergency Contact Number: [Insert Contact Number Here]

2. Composition/Ingredients

- **Chemical Name:** Diphenyl 2-Ethylhexyl Phosphite
- **Concentration:** ≥ 97% (by weight)
- **Hazardous Components:**
 - None present that contribute significantly to classification.

3. Hazards Identification

- **GHS Classification:**
 - Hazard Category: Eye irritation (Category 2), Skin irritation (Category 2)
- **Label Elements:**
 - Signal Word: Warning
 - Hazard Statements:
 - H315 - Causes skin irritation.
 - H319 - Causes serious eye irritation.
 - Precautionary Statements:
 - P264 - Wash hands thoroughly after handling.
 - P280 - Wear protective gloves and eye protection.
 - P305 + P351 + P338 - If in eyes, rinse cautiously with water and remove contact lenses if easy to do.
- **Other Hazards:**
 - May cause slight respiratory irritation upon inhalation of vapors or mist.

4. First Aid Measures

- **General Information:**
 - Remove affected individual from exposure and ensure access to fresh air, if applicable. Seek medical attention if symptoms persist.

- **Eye Contact:**
 - Flush eyes with water for at least 15 minutes. Remove contact lenses if present and continue rinsing. Seek medical attention immediately.
- **Skin Contact:**
 - Rinse with water and wash with soap. If irritation persists, consult a physician.
- **Inhalation:**
 - Move affected person to fresh air and maintain comfortable breathing. Consult a medical professional if symptoms do not improve.
- **Ingestion:**
 - Rinse mouth thoroughly. Do not induce vomiting. Drink water to dilute. Seek immediate medical advice.

5. Handling and Storage

- **Handling Instructions:**
 - Avoid creating aerosols or vapor concentration.
 - Use proper protective equipment when working with the product.
 - Wash hands and face after handling.
- **Storage Requirements:**
 - Store in a cool, dry, and well-ventilated area.
 - Keep away from heat, sparks, and incompatible substances like strong acids or oxidizing agents.
 - Ensure containers are tightly sealed.

6. Exposure Controls/Personal Protection

- **Engineering Controls:**
 - Utilize local exhaust ventilation or proper laboratory fume hoods.
- **Personal Protective Equipment (PPE):**
 - **Eye Protection:**
 - Use chemical splash goggles.
 - **Skin Protection:**
 - Wear protective gloves resistant to chemicals.
 - **Respiratory Protection:**
 - If vapor concentrations exceed occupational exposure limits, use an appropriate respirator.
 - **General Hygiene:**
 - Avoid eating, drinking, or smoking in areas where this material is handled.

7. Physical and Chemical Properties

- **Appearance:** Clear or slightly yellowish liquid
- **Odor:** Mild aromatic odor
- **Boiling Point:** ~220-260°C
- **Melting Point:** Not applicable

- **Flash Point:** >160°C (Closed cup)
- **Solubility:** Insoluble in water; soluble in organic solvents
- **Density:** ~1.03 g/cm³
- **Viscosity:** Moderate
- **pH:** Neutral

8. Stability and Reactivity

- **Chemical Stability:**
 - Stable under recommended storage conditions.
- **Conditions to Avoid:**
 - Avoid high temperatures, open flames, and incompatible materials.
- **Materials to Avoid:**
 - Avoid contact with strong oxidizing agents and acids.
- **Hazardous Decomposition Products:**
 - Thermal decomposition may produce phosphorous oxides and phenol vapors.

9. Toxicological Information

- **Acute Toxicity:**
 - Oral (LD50): >2000 mg/kg (rat, estimated)
 - Dermal (LD50): >2000 mg/kg (rabbit, estimated)
- **Irritation:**
 - Contact with skin or eyes can result in irritation.
- **Sensitization:**
 - Prolonged skin contact may cause sensitization in certain individuals.
- **Chronic Effects:**
 - Not expected to cause long-term negative health effects under normal conditions.
- **Carcinogenicity:**
 - Not listed as a carcinogen by IARC, NTP, or OSHA.

10. Disposal Considerations

- **Waste Disposal Instructions:**
 - Dispose of in accordance with local, state, and federal regulations.
 - Do not release into sewers or waterways.
- **Empty Containers:**
 - Rinse containers thoroughly before disposal or recycling, depending on local protocols.