

Safety Data Sheet (SDS)

Section 1: Identification

1.1 Product Identification

Product Name: 2,4,6-Tris(3-(diphenylphosphinyl)phenyl)-1,3,5-triazine

Product Number: Sigma-1492025191

Brand: Sigma

CAS Number: 1646906-26-4

EC Number: Not specified

Molecular Formula: $C_{57}H_{42}N_3O_3P_3$

Molecular Weight: 909.8989 g/mol

Website: [Sigma Chemical](#)

1.2 Supplier Details

Company Name: Sigma Chemical Co., Ltd.

Address: Room 2-1-2301, Jiahe Xinxing, No.130, Shandong Road, Shibei

District, Qingdao City, Shandong Province, China

Phone Number: +8618661891880

Email: chemweb3@foxmail.com

Business Hours:

Monday to Friday: 9:00AM - 6:00PM

Saturday: 9:00AM - 1:00PM

Sunday: Closed

1.3 Emergency Contact Number

Emergency Contact: +8618661891880

1.4 Recommended Use and Restrictions

Recommended Use: For research and development purposes only. Not for use as a drug, household product, or in any other application without proper authorization.

Section 2: Hazard Identification

2.1 GHS Classification

Acute Toxicity:

Oral: Category 4, H302 (Harmful if swallowed)

Inhalation: Category 4, H332 (Harmful if inhaled)

Specific Target Organ Toxicity (Repeated Exposure):

Inhalation: Category 2, H373 (May cause damage to organs through prolonged or repeated exposure)

2.2 GHS Label Elements

Pictogram: Warning

Signal Word: Warning

Hazard Statements:

H302: Harmful if swallowed

H332: Harmful if inhaled

H373: May cause damage to organs through prolonged or repeated exposure

Precautionary Statements:

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapours/spray

P264: Wash thoroughly after handling

P270: Do not eat, drink, or smoke when using this product

2.3 Physical and Chemical Hazards

Physical and Chemical Hazards: Non-flammable. Ignition sources may

release hazardous products.

2.4 Health Hazards

Health Hazards:

H302: Harmful if swallowed

H332: Harmful if inhaled

H373: May cause damage to organs through prolonged or repeated exposure

2.5 Environmental Hazards

Environmental Hazards: No environmental hazards identified based on

current information.

Section 3: Composition/Information on Ingredients

3.1 Substance

Synonyms: 2,4,6-Tris(3-(diphenylphosphinyl)phenyl)-1,3,5-triazine, PO-T2T

Molecular Formula: $C_{57}H_{42}N_3O_3P_3$

Molecular Weight: 909.8989 g/mol

CAS Number: 1646906-26-4

EC Number: Not specified **Hazardous Components:** **Component:**

2,4,6-Tris(3-(diphenylphosphinyl)phenyl)-1,3,5-triazine

Classification:

Acute Toxicity: Category 4 (Oral), H302

Acute Toxicity: Category 4 (Inhalation), H332

Specific Target Organ Toxicity (Repeated Exposure): Category 2, H373

Section 4: First Aid Measures

4.1 First Aid Measures

Inhalation: Remove victim to fresh air. If feeling unwell, call a POISON CENTER/doctor.

Skin Contact: Immediately wash with plenty of water for at least 15 minutes. Remove contaminated clothing and wash before reuse. Get medical attention if irritation persists.

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if eye irritation persists.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Call a POISON CENTER/doctor if feeling unwell.

4.2 Most Important Symptoms and Effects

Symptoms: Difficulty in breathing. Symptoms of overexposure may include headache, dizziness, tiredness, nausea, and vomiting.

4.3 Immediate Medical Attention and Special Treatment

Medical Treatment: Treat symptomatically.

Section 5: Firefighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Agents: Use fire extinguishing methods suitable for the surrounding environment. Solid water stream may be used.

5.2 Specific Hazards Arising from the Chemical

Hazardous Combustion Products: Carbon monoxide (CO), Carbon dioxide (CO₂), Gaseous hydrogen fluoride (HF)

5.3 Firefighting Precautions

Protective Equipment: Wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective clothing.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment, and Emergency

Procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment as required. Ground all equipment used when handling the product. Avoid contact with skin, eyes, or clothing. Remove all sources of ignition. Take precautionary measures against static discharge.

Environmental Precautions: Prevent seepage into sewage systems, workpits, and surface or ground water.

6.2 Methods and Materials for Containment and Clean-Up

Containment: For small leaks, absorb with inert absorbent material (e.g., sand, diatomite, acid binders, universal binders) or collect in a tightly sealable container. For large leaks, enclose with banks to prevent outflow and lead the leakage to a safe place for disposal.

6.3 Reference to Other Sections

Other Sections: See Section 8 for personal protection equipment and Section 13 for disposal.

Section 7: Handling and Storage

7.1 Handling Precautions

Handling: Ensure adequate ventilation. Wear personal protective equipment/face protection. Use spark-proof tools and explosion-proof equipment. Keep away from open flames, hot surfaces, and sources of ignition. Avoid contact with skin, eyes, or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid ingestion and inhalation. Take precautionary measures against static discharge.

7.2 Storage Conditions

Storage: Store in a dry, cool, and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks, and flame. Store in a flammable area. Keep container tightly closed in a dry and well-ventilated place. Incompatible materials include strong oxidizing agents, strong acids, strong bases, strong reducing agents, and water.

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Limits: No occupational exposure limits established by regional regulatory authorities.

8.2 Exposure Controls

Engineering Measures: Ensure adequate ventilation, especially in confined areas.

Section 9: Physical and Chemical Properties

Physical State: Solid (powder/crystalline)

Color: White or off-white

Odor: Not specified

Melting Point/Freezing Point: Not specified

Boiling Point: Not specified

Flammability: Non-flammable

Solubility: Soluble in common organic solvents (CHCl₃, DCM, toluene, THF, DMF); insoluble in water

Partition Coefficient: Not specified

Vapor Pressure: Not specified

Density: Not specified

pH: Not specified

Section 10: Stability and Reactivity

Reactivity: Stable under normal conditions

Chemical Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: None known

Conditions to Avoid: Strong oxidizing agents, strong acids, strong bases, strong reducing agents, and water

Incompatible Materials: Strong oxidizing agents, strong acids, strong bases, strong reducing agents, and water

Hazardous Decomposition Products: None known

Section 11: Toxicological Information

Acute Toxicity: Category 4 (Oral, Inhalation)

Specific Target Organ Toxicity (Repeated Exposure): Category 2

Skin Corrosion/Irritation: Not specified

Serious Eye Damage/Irritation: Not specified

Skin Sensitization: Not specified

Respiratory Sensitization: Not specified

Germ Cell Mutagenicity: Not specified

Carcinogenicity: Not specified

Reproductive Toxicity: Not specified

STOT - Single Exposure: Not specified

STOT - Repeated Exposure: Not specified

Aspiration Hazard: Not specified

Section 12: Ecological Information

Toxicity: No data available

Persistence and Degradation: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Results of PBT and vPvB Assessment: Not classified as PBT or vPvB

Endocrine Disrupting Properties: No data available

Section 13: Disposal Considerations

Waste Treatment Methods: Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional Information: Recycle only completely emptied packaging. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer, or disposal facility.

Section 14: Transport Information

IATA/IMO/RID/ADR: Not classified as hazardous for transport.

Section 15: Regulatory Information

- **REACH:** Not listed
- **Regulation (EC) N°850/2004:** Not listed
- **Regulation (EC) N°1005/2009:** Not listed
- **Regulation (EU) N°649/2012:** Not listed