



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: 3,3',4,4'-Biphenyltetracarboxylic Dianhydride  
General Use: Starting material for functional polymer.

### MANUFACTURE:

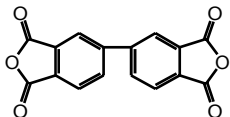
Company Name: Shanghai Liluo Industrial Co., Ltd.  
Address: Rm.5110,N0.735,Liyang Rd.,Shanghai 200080,China  
Telephone: +86-21-56973112  
Facsimile: +86-21-56721121  
URL: <http://www.shliluo.com>

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Product Name  
BPDA

Chemical Name  
3,3',4,4'-Biphenyltetracarboxylic Dianhydride

### Structure



Content (%)  
99 % upper

CAS Registry No.  
2420-87-3

Hazard Symbols: Harmful

Safety Phrases: R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
R36/37 Irritating to eyes and respiratory system.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36 Wear suitable protective clothing.

## 3. HAZARDOUS IDENTIFICATION

### (1) EMERGENCY OVERVIEW:

Appearance: white-slightly yellow, crystalline powder  
Caution: Harmful

### (2) POTENTIAL HEALTH EFFECTS:

• Primary route of exposure

Inhalation: May cause respiratory tract irritation.

Eye contact:	May cause eye irritation
Skin contact	May cause skin irritation
Ingestion:	May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

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#### 4. FIRST AID MEASURES:

- Inhalation: Remove to fresh air. If not breathing, give artificial respirator. If breathing is difficult, give oxygen. Treat symptomatically. If symptoms are present, get medical attention.
- Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical attention.
- Skin contact: Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if symptoms are present after washing. Wash clothing and shoes before reuse.
- Ingestion: After induce vomit with giving plenty of water or common salt water, get medical attention. Never give anything by mouth to an unconscious person.
- Note to physician: Treat Symptomatically and supportively.

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#### 5. FIRE FIGHTING MEASURES

##### (1) FLAMMABLE PROPERTIES

- Flash point : Not available
- Explosion Limits: Not available
- Ignition Temperature: Not available

##### (2) EXTINGUISHING MEDIA:

Water spray  
Carbon dioxide, dry chemical powder or appropriate foam

##### (3) GENERAL INFORMATION:

As in any fire, wear a self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Emits toxic fumes under fire conditions.  
This material, like most materials in powder form, is capable of creating a dust explosion.

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#### 6. ACCIDENTAL RELEASE MEASURES

- For personal protective equipment, refer to “8. EXPOSURE CONTROLS / PERSONAL PROTECTION”.
- Sweep up spills immediately, then place into a chemical waste container.
- Avoid raising dust.
- Ventilate area and wash spill site after material pick up is complete.

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## 7. HANDLING AND STORAGE

### (1) HANDLING:

- Avoid contact with skin, eyes, or clothing.
- Avoid ingestion and inhalation.
- Wash thoroughly after handling.
- Remove contaminated clothing and wash before reuse.
- Use with adequate ventilation.
- Keep container tightly closed.

### (2) STORAGE:

- Store in a cool, dry place, well-ventilated area away from incompatible substances.
- Keep away from heat, sparks and flames.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### (1) ENGINEERING CONTROLS:

- Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
- Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

### (2) PERSONAL PROTECTIVE EQUIPMENT:

- SKIN: Wear appropriate protective gloves to prevent skin exposure.  
Compatible chemical-resistant gloves.
- EYES: Wear appropriate protective eyeglasses or chemical safety goggles.
- CLOTHING: Wear appropriate protective clothing to prevent skin exposure.
- RESPIRATORY: NIOSH/MSHA-approved respirator should be worn if needed.
- EXPOSURE GUIDELINES: ACGIH Not available  
OSHA Not available

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: white-slightly yellow, crystalline powder
- Boiling Point: Not available
- Melting Point: 299 °C (sublimation)
- Specific Gravity: Not available
- Vapor Pressure: Not available
- Vapor Density: Not available
- Viscosity: Not available

- Solubility Not available
- pH: Not available
- Molecular Formula: C16H6O6
- Molecular Weight: 294.22

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#### 10. STABILITY AND REACTIVITY

- Chemical Stability: Stable under normal temperature and pressure
- Conditions to avoid: Incompatible material, strong oxidants.
- Incompatibility with other materials: Strong oxidizing agents.
- Hazardous decomposition products: Combustion will produce CO<sub>2</sub> and probably CO.
- Hazardous Polymerization: Will not occur.

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#### 11. TOXICOLOGICAL INFORMATION ON

- Acute data: Not available
- Subchronic data: Not available
- Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
- Other studies: No data available

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#### 12. ECOLOGICAL INFORMATION

- Ecotoxicity: Not available
- Other: Not available

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#### 13. DISPOSAL CONSIDERATIONS

- Comply with all federal, state and local regulations.
- Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
- Do not dump this material into sewers, on the ground or into any body of water.

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#### 14. TRANSPORT INFORMATION

Not regulated as a hazardous material.

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#### 15. REGULATORY INFORMATION:

Please refer to national measures that may be relevant.

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