

Safety Data Sheet: Pyromellitic Dianhydride

1. Identification

Product	Pyromellitic Dianhydride; CAS 89-32-7; EC 201-898-9
Use	Professional polyimide, polymer-intermediate and curing-agent development.
Company	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
Address	Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China
Telephone / email	+86-21-54265599 / sales@zxchem.com.cn
Emergency contact	ZXCHEM office number above, office hours, China time (UTC+8). For urgent medical assistance contact local emergency services.
Scope	Reference safety information for Pyromellitic Dianhydride. The reference composition, concentration and supply-grade differences are described in Section 3. This document does not certify the composition or transport status of a specific delivered batch or a different formulation.

2. Hazards Identification

Classification	Serious eye damage Category 1; respiratory sensitization Category 1; skin sensitization Category 1.
Signal word / symbols	Danger; GHS05, GHS07, GHS08
Hazard statements	H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Prevention	Provide effective local exhaust where powder is handled. Wear chemical-resistant gloves, splash goggles with face protection and suitable protective clothing. Prevent skin contact and dust inhalation; respiratory sensitization requires a workplace assessment and suitable particulate protection where needed.
Response	After exposure, stop work and seek medical advice. For severe exposure obtain urgent medical care. Rinse contaminated skin or eyes with water; move an inhalation casualty to fresh air.
Environment	Prevent uncontrolled release to drains, soil or surface water. Collect spills for appropriate disposal.



3. Composition / Information on Ingredients

Reference ingredient	Pyromellitic dianhydride, CAS 89-32-7, EC 201-898-9. Selected solid-substance reference $\leq 100\%$; supply assay $\geq 99.5\%$. No unverified impurity identity or supplied-batch concentration is assigned.
Supply grade	Assay $\geq 99.5\%$
Applicability	The cited concentration or purity describes the reference material. It is not a certificate of analysis for the delivered batch; different solvents or dilutions require the matching supplier safety document.

4. First-Aid Measures

General	Protect the rescuer from exposure and show the product information to medical personnel. Obtain medical advice if symptoms occur or exposure is significant.
Inhalation	Move to fresh air and keep at rest. Obtain immediate medical advice for breathing difficulty or asthma symptoms. Trained personnel should provide assisted ventilation if needed.
Skin	Remove contaminated clothing and wash with plenty of soap and water. Obtain medical advice if irritation or rash occurs. Wash clothing before reuse.
Eyes	Immediately rinse with plenty of water for at least 15 minutes. Remove contact lenses if easy and continue rinsing. Immediately call a poison centre or doctor.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain medical advice.
Effects / treatment	Serious eye damage, allergic skin reaction and respiratory allergy or asthma symptoms can occur. Obtain urgent medical attention for eye contact or respiratory symptoms. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide suited to the incident. Firefighters require self-contained breathing apparatus and protective clothing.
Hazards	Stable under recommended dry storage. Exposure to moisture can hydrolyse the anhydride. Fire can release carbon oxides; airborne powder formation requires appropriate dust controls.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personnel	Isolate the spill and provide ventilation. Use chemical-resistant gloves and eye protection; avoid contact and dust exposure.
Environment	Contain the release and protect drains and waterways. Report significant environmental contamination to the responsible authority.
Cleanup	Collect spilled solid without raising dust into closed labelled containers.

7. Handling and Storage

Handling	Provide effective local exhaust where powder is handled. Wear chemical-resistant gloves, splash goggles with face protection and suitable protective clothing. Prevent skin contact and dust inhalation; respiratory sensitization requires a workplace assessment and suitable particulate protection where needed.
Storage	Keep tightly closed in intact moisture-protective packaging in a cool, dry, well-ventilated area. Avoid moisture, alcohols and strong oxidizing agents.
Incompatibilities	Alcohols, strong oxidizing agents and moisture.

8. Exposure Controls / Personal Protection

Exposure limits	The selected reference lists no ingredient-specific occupational exposure limit. Control airborne powder through local exhaust and applicable workplace measures.
Engineering controls	Use local extraction where dust can be generated. Maintain accessible eyewash and emergency washing facilities.
Personal protection	Wear chemical-resistant gloves selected for the task, suitable protective clothing and splash goggles. Add face protection for splash-prone tasks.
Respiratory protection	Use a properly selected respirator under a respiratory-protection program where engineering controls do not adequately limit airborne exposure.
Hygiene	Wash after handling, remove contaminated clothing promptly and do not eat, drink or smoke in the work area.

9. Physical and Chemical Properties

Appearance	White crystalline, moisture-sensitive powder
Formula / molecular weight	C ₁₀ H ₂ O ₆ / 218.12 g/mol
Physical state	White solid powder
Molecular formula	C ₁₀ H ₂ O ₆
Molecular weight	218.12 g/mol
Melting range, supply TDS	286–287.5°C
Melting range, selected reference	283–286°C
Boiling range, selected reference	397–400°C
Moisture sensitivity	Keep dry; moisture can hydrolyse the anhydride
Other properties	Product-specific values for odor threshold, vapor pressure, partition coefficient, autoignition temperature and viscosity are not supplied by the selected reference set. No values are inferred.

10. Stability and Reactivity

Stability	Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.
Incompatibilities	Alcohols, strong oxidizing agents and moisture.
Decomposition	Stable under recommended dry storage. Exposure to moisture can hydrolyse the anhydride. Fire can release carbon oxides; airborne powder formation requires appropriate dust controls.

11. Toxicological Information

Exposure effects	Serious eye damage, allergic skin reaction and respiratory allergy or asthma symptoms can occur. Obtain urgent medical attention for eye contact or respiratory symptoms.
Reference classification	Serious eye damage Category 1; respiratory sensitization Category 1; skin sensitization Category 1.
Data limits	Selected reference oral rat LD ₅₀ 2,250 mg/kg and severe eye irritation in rabbit. Respiratory and skin sensitization classifications are retained. Quantitative inhalation, dermal, repeated-dose and reproductive endpoints are not established.

12. Ecological Information

Environmental effects	The selected reference provides no quantitative aquatic toxicity, persistence, bioaccumulation or soil-mobility endpoints and no completed PBT/vPvB assessment. Prevent release to drains, soil and waterways.
Controls	Prevent uncontrolled release, collect spills and dispose of contaminated material through an authorized route.
Assessment	No product-specific PBT/vPvB assessment is claimed. Absence of data does not establish absence of environmental effects.

13. Disposal Considerations

Product	Collect surplus product and contaminated cleanup material for disposal by an authorized chemical-waste contractor in accordance with local requirements.
Packaging	Containers may retain product residues. Do not reuse contaminated packaging without an approved cleaning process; use an authorized disposal route.

14. Transport Information

Classification	Non-dangerous goods
UN number	Not assigned
Shipping name	Not regulated as dangerous goods
Class / packing group	DOT / IMDG / IATA: non-dangerous goods for the selected solid-substance reference; no UN number or packing group assigned.
Transport precautions	Protect packaging and closures from damage, secure loads and prevent releases. This reference is not a shipping declaration for a specific consignment.

15. Regulatory Information

Identity	Pyromellitic Dianhydride; CAS 89-32-7; EC 201-898-9
HS reference	291739; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish authorization for a finished formulation.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Limitations	Prepared as reference safety information for the identified material. It is not a batch analytical certificate or safety assessment of a different solvent-containing formulation.
Revision	2026.1; prepared 2026-10-07. Customer-document branding and title corrected; technical safety data retained.
Document scope	Reference safety information for the material and grade described in Sections 1 and 3. Different concentrations, solvents or formulations require the applicable safety information. This is not a batch analytical certificate.

Revision: 2026.1 | Revision date: 2026-10-07