SAFETY DATA SHEET

PINHONBIO® Bemotrizinol (BEMT)

1. Identification

Product identifier	PINHONBIO® Bemotrizinol (BEMT)
INCI name	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine
Recommended use	UV filter for cosmetic formulation and industrial manufacture.
Supplier	Shaanxi Pinhon Biotechnology Co., Ltd. Room 704, Unit 2, Building 1, I-Duhui, No. 11 Tangyan South Road, Yanta District, Xi'an, Shaanxi, China
Technical contact	tech@pinhoningredients.com
Emergency contact	Albert Zhao | +86 173 0298 1616 09:00–18:00 China Standard Time (UTC+8). Outside these hours, contact local emergency services.

2. Hazard identification

Classification Bemotrizinol is not classified as hazardous under Regulation (EC) No. 1272/2008 (CLP) on the available substance data.

Label elements No hazard pictogram, signal word or hazard statement is required under this classification.

Other hazards Fine powder dispersed in air can form an explosive dust cloud. Avoid ignition sources and prevent dust accumulation. Airborne particles may cause mechanical discomfort in the eyes or airways.

3. Composition and information on ingredients

Chemical name	CAS No.	EC No.	Weight %
Bemotrizinol	187393-00-6	425-950-7	100%

4. First-aid measures

Inhalation Move to fresh air. Obtain medical attention if coughing or difficulty breathing persists.

Eyes Rinse gently with clean water for several minutes. Remove contact lenses if easy to do. Seek medical advice if discomfort persists.

Skin Remove contaminated clothing. Wash exposed skin with soap and water.

Ingestion Rinse mouth. Seek medical advice if unwell. Never give anything by mouth to an unconscious person.

Medical attention Treat symptoms. Dust exposure may cause temporary eye or respiratory discomfort.

5. Firefighting measures

Use water mist, dry chemical, foam or carbon dioxide. Avoid a forceful water jet that can disperse dust. Combustion may release carbon and nitrogen oxides. Firefighters should use self-contained breathing apparatus and protective clothing. Contain contaminated runoff.

6. Accidental release measures

Keep personnel clear of airborne dust. Ventilate the area and remove ignition sources. Wear the protection described in Section 8. Collect powder with a vacuum suitable for combustible dust or another low-dust method. Place it in a closed, labeled container. Keep it out of drains and waterways.

7. Handling and storage

Handling Use local extraction at weighing, transfer and mixing points. Keep equipment grounded where dust may disperse. Clean deposits regularly. Avoid compressed air for cleanup.

Storage Keep containers tightly closed in a cool, dry area away from strong light, heat and ignition sources. Separate from strong oxidizing agents, acids and bases.

8. Exposure controls and personal protection

Exposure limits No substance-specific occupational exposure limit has been identified. Apply local workplace limits for airborne dust where applicable.

Engineering controls Enclose dusty transfers or provide local exhaust ventilation. Use equipment suitable for combustible dust where a dust cloud can form.

Personal protection Wear safety glasses with side shields or dust goggles, protective gloves and work clothing. If ventilation cannot adequately control dust, select an approved particulate respirator appropriate to the exposure.

Hygiene Wash hands after handling and before eating. Wash contaminated work clothing before reuse.

9. Physical and chemical properties

Physical state, color and odor	Light yellow to yellow powder with a characteristic odor.
Melting range	81–86 °C
Solubility	Very low water solubility. Soluble in selected cosmetic oils and emollients.
Flammability and explosion hazard	Airborne dust may ignite. Dust explosion parameters for this grade have not been determined.
Partition coefficient	Published log Kow >5.7 at 20 °C.
Other properties	No grade-specific data for boiling point, flash point, autoignition or decomposition temperature, vapor pressure, density, explosion limits or particle size distribution.
pH, kinematic viscosity and relative vapor density	Not applicable to the supplied solid.

10. Stability and reactivity

Stable under the recommended storage conditions. Avoid heat, sparks, flames, suspended dust and contact with strong oxidizers, acids or bases. Hazardous reactions are not expected in normal use. Thermal decomposition can produce smoke, carbon monoxide, carbon dioxide and nitrogen oxides.

11. Toxicological information

Routes of exposure Inhalation of dust, eye or skin contact and accidental ingestion.

Acute toxicity Published rat studies report dermal LD50 above 2,000 mg/kg for bemotrizinol and oral LD50 above 2,000 mg/kg for similar material. An acute inhalation LC50 has not been established for this grade.

Local effects and sensitization Available in vitro studies found no skin or eye irritation and negative skin sensitization responses. Dust can still cause transient mechanical discomfort.

Longer-term effects Available substance data do not support CLP classification for mutagenicity, carcinogenicity, reproductive toxicity, specific target organ toxicity or aspiration hazard.

12. Ecological information

Aquatic effects Published tests on similar material reported no toxicity to algae at the water-solubility limit. Prevent releases to surface water and sewers.

Environmental fate A 28-day biodegradation test on similar material showed limited degradation. The substance has a high octanol/water partition coefficient. Product-specific bioconcentration and soil mobility data are unavailable.

13. Disposal considerations

Collect residues, spill cleanup material and contaminated containers for disposal through an authorized waste contractor in accordance with local requirements. Keep waste powder out of drains. Send clean packaging for recycling where accepted.

14. Transport information

Road/rail (ADR/RID), sea (IMDG), air (IATA)	Not regulated as dangerous goods.
UN number, proper shipping name, class and packing group	Not assigned.
Environmental hazards / marine pollutant	Not classified as a marine pollutant.
Handling in transit	Keep packages closed, dry and secured against damage.
Maritime transport in bulk	Not applicable to this packaged product.

15. Regulatory information

The hazard classification in Section 2 uses EU CLP criteria. Bemotrizinol is listed in Annex VI, entry 25, of the EU Cosmetics Regulation (EC) No. 1223/2009. Conditions of use in finished products depend on the destination market.

16. Other information

Issue date and version 14 November 2026 | Version 1.0.

Sources: PINHONBIO product specification for BEMT. LGC Standards, Bemotrizinol SDS, DRE-C10435000 (4 September 2025). DSM, PARSOL® Shield SDS, version 2.4 (22 June 2017). ECHA, EU Cosmetics Regulation Annex VI, entry 25 (CAS 187393-00-6).