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SAFETY DATA SHEET (SDS)

ZINC GLYCEROLATE (Micronized) CAS Number: 557-48-0

1. Identification of the Substance/Mixture and of the Company/Undertaking

Field	Information
Product Name	ZINC GLYCEROLATE (MICRONIZED)
CAS Number	557-48-0
Relevant Identified Uses	Nucleating agent for PLA and biopolymers; crystallization modifier;
	processing aid for biodegradable plastics; functional additive in
	masterbatches
Uses Advised Against	Not intended for pharmaceutical or direct food use unless
	specifically tested and certified
Supplier	Polymer Add (Thailand) Co., Ltd
Office Address	106, Chalaremprakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet,
	Bangkok, Thailand 10250
Factory Address	188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan,
	Samutprakan, Thailand 10280
Mobile (Thai)	0804531391
Mobile (English)	0839415475
Email	contact@polymeradd.co.th

2. Hazards Identification

Field	Description		Description	
Classification (CLP)	Not classified under Regulation (EC) No. 1272/2008			
Classification (67/548/EEC)	Not classified			
Label Elements	No hazard pictograms or signal words required			
Supplemental	EUH210: Safety data sheet available on request			

3. Composition/Information on Ingredients

Substance	CAS No	EC No	Purity
Zinc Glycerolate	557-48-0	209-184-5	≥ 98%

4. First Aid Measures

- **General Advice:** No specific hazards under normal industrial use.
- **Inhalation:** Move to fresh air. Seek medical attention if irritation persists.
- **Skin Contact:** Wash with soap and water. If irritation develops, consult a physician.

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- **Eye Contact:** Rinse cautiously with clean water for several minutes. Seek medical advice if irritation persists.
- Ingestion: Rinse mouth. Do not induce vomiting. Seek medical attention if discomfort occurs.

5. Firefighting Measures

- Extinguishing Media: Dry chemical, foam, CO₂, or water spray.
- **Fire Hazards:** Thermal decomposition may release zinc oxide fumes, glycerol vapours, CO, and CO₂. Fine powder may form explosive dust–air mixtures.
- **Protective Equipment:** Self-contained breathing apparatus and full protective clothing should be worn.

6. Accidental Release Measures

- Personal Precautions: Avoid dust formation. Use PPE (mask, goggles, gloves).
- Environmental Precautions: Prevent release to drains, soil, or waterways.
- **Clean-Up Methods:** Sweep or vacuum without generating dust. Collect in sealed containers for disposal per local regulations.

7. Handling and Storage

- **Handling:** Avoid inhalation of dust. Avoid contact with eyes or skin. Use with adequate ventilation.
- **Storage:** Store in a cool, dry, ventilated area. Keep containers tightly closed. Protect from moisture, acids, and oxidizing agents.

8. Exposure Controls / Personal Protection

Field	Information
OEL (TWA)	No specific limit; follow general dust limits (10 mg/m³ inhalable, 5
	mg/m³ respirable)
Engineering Controls	Local exhaust ventilation, dust collection systems
PPE	Dust mask (P2), chemical-resistant gloves, safety goggles
Environmental Controls	Prevent contamination of drains and water bodies

9. Physical and Chemical Properties

Property	Value
1 Topolty	Vatao

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Appearance	White to off-white fine powder
Odour	Odourless to faint
pH (1% dispersion)	~6–8
Melting Point	>300 °C (decomposes)
Boiling Point	Not applicable
Flash Point	Not applicable
Flammability	Combustible as fine powder
Vapour Pressure	Negligible
Relative Density	~1.9–2.1
Solubility in Water	Insoluble
Auto-Ignition Temperature	Not determined
Decomposition Temperature	>300 °C
Explosive Properties	Dust explosion risk when airborne
Oxidizing Properties	None

10. Stability and Reactivity

- Stability: Stable under recommended handling and storage conditions.
- Hazardous Reactions: None expected under normal conditions.
- Incompatible Materials: Strong acids, oxidizing agents.
- **Decomposition Products:** CO, CO₂, zinc oxide fumes, glycerol derivatives.

11. Toxicological Information

Test	Result
Oral LD ₅₀ (rat)	>2000 mg/kg (estimated, low toxicity)
Skin Irritation	Not irritating
Eye Irritation	May cause mild mechanical irritation
Sensitization	Not expected
Carcinogenicity	Not listed by IARC, NTP, OSHA

12. Ecological Information

Organism	Test	Result
Fish	LC ₅₀ (96 h, estimated)	>100 mg/L
Daphnia	EC ₅₀ (48 h)	>100 mg/L
Algae	EC ₅₀ (72 h)	>100 mg/L

Conclusion:

- Poor water solubility
- Not expected to bioaccumulate

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- Not readily biodegradable
- Avoid uncontrolled release into environment

13. Disposal Considerations

- **Product Waste:** Dispose in accordance with local/national regulations.
- Contaminated Packaging: Clean before reuse or dispose as solid waste.
- EU Waste Code: 07 06 99 Wastes not otherwise specified

14. Transport Information

Mode	Classification	Remarks
ADR/RID	Not regulated	Not classified as dangerous goods
IMDG	Not regulated	Not a marine pollutant
ICAO/IATA	Not regulated	Not restricted
DOT (USA)	Not regulated	Not hazardous for transport

15. Regulatory Information

REACH: Exempt or pre-registered

CLP (EC No. 1272/2008): Not classified

• Inventories: Expected to be listed in TSCA, DSL, AICS, IECSC, ENCS, KECI, PICCS, NZIoC

16. Other Information - Zinc Glycerolate (CAS 557-48-0)

SDS Version: 1.0 / 2025

Date of Preparation: December 2025

Reason for Issue: First SDS issued for micronized technical grade

Abbreviations:

CAS - Chemical Abstracts Service

CLP - Classification, Labelling and Packaging

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals

LD₅₀ – Median Lethal Dose

EC₅₀ – Half Maximal Effective Concentration

Disclaimer:

This SDS is provided for industrial handling and transportation purposes only. It does not constitute a

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