

SAFETY DATA SHEETS

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0

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SECTION 1: Identification of the substance

Product identifiers

Product name: Poly(1,4-butene adipate)

CAS-No.: 25103-87-1

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

Details of the supplier of the safety data sheet

Company: CHEMLYTE SOLUTIONS CO., LTD

Address: A1-3-830, XiXi Center, No. 588, Wenyi West Road, Hangzhou 310000,
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Emergency telephone number

Emergency Phone # : +1-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This chemical substance is not otherwise classified according to the Globally Harmonized System of Classification and Labelling of Chemical Substances (GHS).

2.2 Label elements

GHS Label Elements invalid

Pictogram invalid

Signal invalid

Hazard Statements invalid

2.3 Other harmful effects

PBT (persistent, bioconcentrated, toxic substances) and vPvB (highly persistent and highly bioconcentrated substances) evaluation results

PBT (Persistent, Bioconcentrated, Toxic): Not applicable

vPvB (highly persistent and highly bioconcentrated substances): Not applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Molecular formula N/A

Molecular weight Average molecular weight 12,000
CAS number Chemical name, Common name 25103-87-1 Poly(1,4-butylene adipate)

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Take off immediately any clothing contaminated with the product, seek medical advice/attention, and show this safety data sheet to any doctor who arrives on the scene.

If inhaled

Remove victim to fresh air. If not breathing, give artificial respiration. Get medical advice/attention.

In case of skin contact

Immediately rinse thoroughly with water and soap.

In case of eye contact

Rinse with running water for several minutes. If easy and convenient, remove contact lenses before washing. Seek medical advice.

If swallowed

Please seek medical help immediately.

4.2 Advice for protecting rescuers and special instructions for doctors

Move the patient to a safe place. Consult a doctor. Show this MSDS to the doctor who arrives at the scene.

Inform medical staff of the contamination and ask them to take appropriate protective measures.

4.3 Indication of any immediate medical attention and special treatment needed

Depending on the degree of exposure, regular medical examinations are recommended.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Fire extinguishing methods and extinguishing Use fire-fighting measures appropriate to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Fire extinguishing precautions and measures

Unauthorized personnel are prohibited from entering.

If necessary, wear self-contained breathing apparatus to fight fire.

Use appropriate firefighting measures for surrounding fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Handle damaged containers or spilled material wearing appropriate protective gear.

Wear respiratory protection if necessary.

Do not touch spilled material. Stop the leak if you can do it without risking it.

6.2 Environmental precautions

Do not allow to enter drains/surface or ground water.

6.3 Methods and materials for containment and cleaning up

Small spills: Sweep or vacuum into suitable containers. Clean surrounding area and remove residual material.

Large spills: Collect material in dedicated containers. Avoid dust generation and accumulation. Avoid entry into sewers, surface water and groundwater. Cover with foam to inhibit evaporation. Sweep and clean up the area.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protective equipment.

See Section 13 for information on disposal.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Precautions for safe operation: No special precautions are required if used correctly.

Provide suitable exhaust ventilation where dust is generated.

Information about fire and explosion prevention: No special measures are required.

Mixed Hazards and Other Safe Storage Conditions

7.2 Conditions for safe storage, including any incompatibilities

Requirements for repositories and containers: There are no special requirements.

For information on using a common storage facility for storage: Store in a cool place. Store in a dry and ventilated place.

Further information about storage conditions: Store in a cool place. Keep the container tightly closed in a dry and ventilated place.

7.3 Additional Information

No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Engineering Controls:

Install a closed system or local exhaust system as much as possible, and operators should not come into direct contact with it. Install showers and eyewash stations at the same time.

Control parameters

Contact Limit: Not required

Additional Information: The list valid during the production period will be used as a basis.

8.2 Personal protective equipment:

General protection and hygiene measures:

Normal precautions should be followed when handling chemicals.

Respiratory protection: No special protective measures are required.

Hand protection:

The glove material must be impermeable and resistant to the product/substance/additive.

Due to lack of testing, no recommendations for glove material can be given for the product/preparation/chemical mixture.

When selecting glove material, please pay attention to the material's penetration time, percolation rate and degradation parameters.

Glove material: Choosing the right glove depends not only on the material, but also on the quality characteristics and which manufacturer it comes from.

Time to penetrate into glove material: Please obtain the exact break-in time from the protective glove manufacturer and observe the actual break-in time.

Eye protection: Goggles

Use eye protection that is tested and approved by official standards such as NIOSH (USA) or EN 166 (EU).

Body protection: Complete set of chemical protection work clothes. The type of protective equipment must be selected according to the concentration and content of dangerous substances in the specific workplace.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Properties: solid

Colour: White

Odor: No data available

Olfaction threshold No data available

pH value (specified concentration): Not applicable

Change of conditions

Melting point/freezing point: 56-60 °C

Boiling point/initial boiling point and boiling range: 350 °C

Flash point: >113 °C

Decomposition temperature: No data available

Ignition temperature: No data available

Explosion Hazard: This product does not pose a risk of explosion

Explosion limit:

Lower limit: no data available

Upper limit: no data

Saturated vapor pressure: Not applicable

Density at 20 °C: 1.019 g/cm³

Bulk Density: No data available

Corresponding density (water=1): No data available

Relative vapor density (air=1): Not applicable

Evaporation rate: Not applicable

Flammability: No data available

Solubility: No data available

Water: No data available

Other solvents: No data available

n-octanol/water partition coefficient: No data available

Heat of combustion (KJ/mol): No data available

Critical pressure (MPa): No data available

Critical temperature (°C): No data available

Viscosity:

Dynamic: Not applicable

Kinematic: Not applicable

Other information

No data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity No data available

10.2 Stability No data available

Thermal decomposition/conditions to avoid: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No hazardous reactions known.

10.4 Conditions to avoid No data available

10.5 Incompatible materials Strong oxidizing agents

10.6 Hazardous decomposition products No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity****Major irritation/corrosion effects:**

Skin: No irritation effects.

Eyes: No irritation effects.

Sensitization: No known sensitizing effects.

Data on possible effects on the following groups:**CMR effects (carcinogenic, mutagenic, harmful to reproductive system)**

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

SECTION 12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity**

Aquatic toxicity: No data available

12.2 Persistence and degradability No data available

12.3 Behavior in environmental systems

Potential for bioaccumulation No data available

Mobility in soil No data available

12.4 Other ecological information

Formula according to EU Directive 76/464/EC containing the following heavy metals and mixtures: No data available

General notes: Water hazard class 1 (German regulations) (self-assessment by list): slightly hazardous to water

Do not allow undiluted or large quantities of product to come into contact with groundwater, waterways or sewage systems.

PBT and vPvB assessment results

PBT: Not applicable

vPvB: Not applicable

Other side effects No data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Products Products that are no longer in use or solutions that cannot be reused need to be handed over to a legally qualified chemical disposal company for disposal.

13.2 Contaminated packaging The disposal method is the same as that of products no longer in use.

13.3 Disposal precautions Before disposal, please refer to relevant national and local regulations. See Section 8 for safety precautions for disposal personnel.

SECTION 14. TRANSPORT INFORMATION

14.1 United Nations Dangerous Goods Number (UN Number)

ADR, ADN, IMDG, IATA Not available

14.2 United Nations (UN) Name

ADR, ADN, IMDG, IATA Not available

14.3 Transport Hazard Class

ADR, IMDG, IATA

Class Not available

Label -

ADN

ADN/R Class: Not available

14.4 Packing Group

ADR, IMDG, IATA Not available

14.5 Environmental Hazards

Maritime Pollutant: Not available

14.6 Special precautions for user

 Not applicable

Annex 2 to MARPOL 73/78 (Agreement on the Prevention of Marine Pollution from Ships) and bulk shipments under the IBC Code Not applicable

Transport/Additional information: No data available

UN "Standard Regulations": Not available

SECTION 15. REGULATORY INFORMATION

15.1 Regulations/legislation specific to the safety, health and environment of this substance or mixture

Regulations on the Safety Management of Hazardous Chemicals (Decree No. 591 of the State Council of the People's Republic of China)

Catalogue of Hazardous Chemicals (2015 edition): No substances are listed.

Regulations on the Environmental Management of the First Import of Chemicals and the Import and Export of Toxic Chemicals

List of Dangerous Goods (GB12268-2012): Not included

Chemical safety assessment: No chemical safety assessment has been conducted.

SECTION 16. OTHER INFORMATION

Disclaimer

The above content is compiled based on the information we can collect and does not represent a guarantee of the product's properties.

If there is relevant new information, we will make corrections in a timely manner. Regarding the data and the evaluation of hazards and toxicity, please conduct a detailed investigation before use, and the laws and regulations of the organization, region and country where the product is used should be given priority.

Considering safety issues, the product should be used immediately after purchase. It is well known that chemicals have "unknown hazards and toxicity", which can vary greatly under different conditions of use and storage conditions. The entire process from opening to storage to disposal of this product must be used by operators who are familiar with professional knowledge and have experience or under the guidance of experts. Every user is responsible for establishing a safe use environment. When the product is not used in accordance with the material safety data sheet or is used with other products and operating processes, the consequences are the responsibility of the user.

abbreviation:

PBT: Persistent Bioaccumulative Toxic Substances

IARC: International Agency for Research on Cancer

RTECS: National Institute for Occupational Safety and Health Chemical Toxicity Database

HSDB: Hazardous Substances Database of the National Library of Medicine

ACGIH: American Conference of Governmental Industrial Hygienists