

According to 1907/2006/EC, Article 31

Date Printed 09.01.2023 Version 7 (Replaces Version 6) Revision Date 09.12.2022

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

· <u>Product Identifier:</u> Formolene® Linear Low Density Polyethylene-Butene Copolymer

· Synonyms: LLDPE-B Copolymer

· Product Code: L42----

· CAS Number:

25087-34-7

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Resin, extrusion and compounding, plastic molding, molded articles, films and coatings.

· Manufacturer/Supplier:

Formosa Plastics Corporation, Texas

201 Formosa Drive

Point Comfort, TX 77978 USA

+1 (361) 987-7000

E-Mail: MSDS@fpcusa.com

· European REACH Representative:

INTERTEK FRANCE

Allée de la Fosse Moret

Ecological park 2

27400 Heudebouville

France

Telephone number: +33 2 79 23 03 49 Email address: if.reach@intertek.com

· Business Division: Linear-Low Density Polyethylene

· Emergency Telephone Number:

In case of a chemical emergency, contact CHEMTREC (24 hrs) at:

- +1 (800) 424-9300 (United States, Canada, Puerto Rico, Virgin Islands)
- +1 (703) 527-3887 (International & Maritime)

Section 2: Hazards Identification

- · Classification of the Substance or Mixture:
- · Classification according to Regulation (EC) No 1272/2008

Combustible dust. May form combustible dust concentrations in air.

This product is not classified as hazardous according to the European CLP regulation.

Hazards Not Otherwise Classified:

Molten material may cause thermal burns.

Spilled pellets present slip and fall hazard.

- · Label Elements:
- · Hazard Pictograms: Not applicable.
- · Signal Word: Not applicable.
- · Hazard Statements: May form combustible dust concentrations in air.
- · Precautionary Statements:

Product is a static accumulator.

P240 Ground and bond containers and receiving equipment.

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P210 Keep away from sparks and open flame.

Additional Information:

If you do not understand the hazards or safety precautions described in this data sheet, contact your supervisor or safety administrator before handling this product.

Section 3: Composition/Information on Ingredients

- Substances
- CAS No. Description

25087-34-7 ethylene-butene copolymer (>99%)

Section 4: First Aid Measures

· General Information: Provide symptomatic and supportive care.

· After Inhalation:

Remove victim to fresh air.

Administer oxygen if breathing is difficult.

Administer artifical respiration if breathing has stopped.

Get medical assistance if irritation or other symptoms develop.

· After Skin Contact:

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product off the skin.

Get medical advice/attention.

After Eye Contact:

In case of accidental contact, immediately flush eyes with water.

Hold eyelids open to ensure adequate flushing.

Get medical assistance if irritation or other symptoms develop.

After Swallowing:

Administer 1-2 glasses of water to dilute ingested material.

Never give anything by mouth to an unconscious person.

Get medical advice/attention.

· Most Important Symptoms and Effects, Both Acute and Delayed: No further relevant information available.

Section 5: Firefighting Measures

- · Suitable Extinguishing Agents: CO2, powder or water spray. Fight larger fires with water spray.
- · Special Hazards Arising from the Substance or Mixture:

Product is supplied as pellets. Dust formed during processing or handling may form combustible dust concentrations in air.

· Advice for Firefighters:

Protective Equipment:

In the event of a fire, wear a NIOSH (USA) or CEN (EU) approved self-contained breathing apparatus (SCBA) and full protective clothing.

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Section 6: Accidental Release Measures

· Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation of dust.

Wear appropriate personal protective equipment during all clean-up activities. See Section 8 for more information.

· Environmental Precautions: Keep spilled material out of sewage/drainage systems and waterways.

· Methods and Material for Containment and Cleaning Up:

Collect spilled material mechanically.

Place waste in an appropriate container for disposal.

· Reference to Other Sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7: Handling and Storage

· Precautions for Safe Handling:

Avoid formation of dust.

Accumulations of dust should be removed from settling areas.

Follow good engineering and work practices, including routine housekeeping.

Promptly clean up spills to avoid slip and fall hazard.

Use only in well ventilated areas.

· Protection Against Fires and Explosions:

Dust can combine with air to form an explosive mixture.

Take precautions against static discharge.

Transfer and store in properly bonded and grounded containers.

To determine required precautions, consult applicable standards such as NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (latest edition), and NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas.

· Conditions for Safe Storage, Including Any Incompatibilities:

Store in closed, properly labeled containers.

Protect containers from heat, physical damage, ignition sources and incompatible materials.

Have emergency equipment for fires and spills readily available.

· Specific End Uses: Resin, extrusion and compounding, plastic molding, molded articles, films and coatings.

Section 8: Exposure Controls/Personal Protection

· Control Parameters:

Occupational Exposure Limits:

Use occupational exposure limits for dust when controlling exposure to this product.

- Exposure Controls: None required under normal conditions of use.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures: Wash thoroughly after handling.

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- · Respiratory protection: None required under normal conditions of use.
- · Hand protection



Work gloves.

Eye/face protection



Safety glasses with side shields.

- Body protection: Protective work clothing
- · Additional Information:

If unusual exposures are expected, an industrial hygiene review of work practices, engineering controls and personal protective equipment is recommended.

Section 9: Physical and Chemical Properties

· Information on Basic Physical and Chemical Properties:

Colour: White
Odourless
Odour Threshold: Not determined.

• Melting Point/Freezing Point: 131 °C

· Boiling Point or Initial Boiling Point and Boiling

Range: Not determined.

· Flammability: Product is not flammable.

· Lower and Upper Explosion Limit:

Lower: Not determined.Upper: Not determined.

• Flash Point: 335 °C
• Ignition Temperature: 342 °C

· pH: Not determined. · Viscosity: Not determined.

· Solubility:

• Water: Insoluble.
• Partition Coefficient n-octanol/water (log value): Not determine the value of the value

Partition Coefficient n-octanol/water (log value):
 Vapour Pressure:
 Not determined.
 Not determined.

Density and/or relative density

Density at 20 °C: 0.919-0.953 g/cm³
 Vapour Density: Not determined.
 Particle characteristics See item 3.

Other Information:

· Physical State: Pellets

· Auto-Ignition Temperature: Not determined.

• Explosive Properties: Product does not present an explosion hazard.

Organic solvents: 0.0 %

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· Evaporation Rate:	Not determined

· Information with regard to physical hazard classes

Not applicable. Explosives · Flammable gases Not applicable. · Aerosols Not applicable. · Oxidising gases Not applicable. · Gases under pressure Not applicable. · Flammable liquids Not applicable. · Flammable solids Not applicable. · Self-reactive substances and mixtures Not applicable. Not applicable. · Pyrophoric liquids Not applicable. Pyrophoric solids Not applicable. Self-heating substances and mixtures

Substances and mixtures, which emit flammable gases in contact with water

Oxidising liquids
Oxidising solids
Organic peroxides
Corrosive to metals
Desensitised explosives

Not applicable.
Not applicable.
Not applicable.
Not applicable.

Section 10: Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical Stability: Stable under anticipated conditions of use.
- Conditions to Avoid:

Combustible dust. May form combustible dust concentrations in air. Stable up to melting point.

- · Possibility of Hazardous Reactions: No dangerous reactions known.
- · Conditions to Avoid: No further relevant information available.
- · Hazardous Decomposition Products: No dangerous decomposition products known.

Section 11: Toxicological Information

- · Acute Toxicity: This product is not acutely toxic.
- \cdot Skin Corrosion/Irritation: Not expected to cause skin irritation.
- · Serious Eye Damage/Irritation: Mechanical eye irritation.
- · Respiratory Irritation: May cause respiratory irritation.
- · Respiratory or Skin Sensitisation: No data available.
- · Subacute to Chronic Toxicity: No data available.

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- · Information on Other Hazards:
- · Endocrine Disrupting Properties:

Substance is not listed.

Section 12: Ecological Information

- · Aquatic Toxicity: No data available.
- · Persistence and Degradability: No data available.
- · Bioaccumulative Potential: No data available.
- · Mobility in Soil: No further relevant information available.
- · Endocrine Disrupting Properties:

The product does not contain substances with endocrine disrupting properties.

Section 13: Disposal Considerations

Disposal Instructions:

Dispose of waste in accordance with applicable laws and regulations.

Maximize product recovery for reuse or recycling.

Section 14: Transport Information

· UN number or ID number

· ADR, IMDG, IATA Not applicable.

· UN Proper Shipping Name:

· ADR, IMDG, IATA Not applicable.

· Transport Hazard Class(es):

· ADR, IMDG, IATA

· Class Not applicable.

· Packing Group:

· ADR, IMDG, IATA Not applicable.

· Environmental Hazards: Not applicable.

· Maritime Transport in Bulk According to IMO

Instruments: Not applicable.

• Transport/Additional information: This product is not regulated as a hazardous material/

dangerous good for transportation.

· UN "Model Regulation": Not applicable.

— EU —

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Section 15: Regulatory Information

- · Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:
- · Hazard Pictograms: Not applicable.
- Signal Word: Not applicable.
- · Hazard Statements: Combustible dust.
- · Precautionary Statements:

Product is a static accumulator.

P240 Ground and bond containers and receiving equipment.

P210 Keep away from sparks and open flame.

- Directive 2004/42/EC
- · Directive 2012/18/EU:
- · Named Dangerous Substances ANNEX I: Substance is not listed.
- · Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

Substance is not listed.

· Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out.

Section 16: Other Information

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Formosa Plastics Corporation, U.S.A. at the time it was prepared. Formosa Plastics Corporation, U.S.A. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, Formosa Plastics Corporation, U.S.A. and its subsidiaries cannot guarantee that these are the only hazards that exist. Formosa Plastics Corporation, U.S.A. assumes no legal responsibility for loss, damage or expense arising out of, or in any way connected with, the handling, storage, use or disposal of this product.

- · Department Issuing Safety Data Sheet: Corporate Environment, Health & Safety
- · Version number of previous version: 6
- Abbreviations and Acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labeling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Sources

This Safety Data Sheet conforms to regulation 1907/2006/EC (REACH). This product has been classified in accordance with European CLP regulations (1272/2008/EC).

* - Indicates that data has been updated from the previous version.