CARMEL OLEFINS LTD.

Safety Data Sheet - Ipethene® 320

According to Regulation (EC) No 1907/2006 (REACH) as amended by Commission Regulation (EU) 2020/878

Date of issue: 01/01/2024

1. Identification of the substance / mixture and of the company/ undertaking

1.1 Product identifier

Trade name	Ipethene® 320
Chemical Name	Low density polyethylene
Chemical Formula	(C2H4)n
CAS No. Designation	9002-88-4

1.2 Relevant identified uses of the substance/ mixture

Recommended use	Raw material for industrial use into plastic articles Not recommended for medical or pharmaceutical applications

1.3 Details of the supplier of the safety data sheet

Manufacturer	Carmel Olefins Ltd. P.O.B. 1468 HAIFA 31014, Israel
Contact	R&D and Customer Service Department
Telephone	+972-4-8466813
E-mail	techserv@caol.co.il
Website	http://www.carmel-olefins.co.il

1.4 Emergency telephone number

Emergency Number	+972-4-8466025

2. Hazards Identification

2.1 Classification	This product is not classified as hazardous according to EC regulation no. 1272/2008 (CLP) and subsequent amendments up to and including regulation no. 2023/1434.
2.2 Labelling	This product does not require labelling according to EC regulation no. 1272/2008 (CLP) and subsequent amendments up to and including regulation no. 2023/1434.
2.3 Other hazards	Spilled granulated material may present a slipping hazard. Molten product may adhere to the skin and cause thermal burns. Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Dust formation may present a potential dust explosion hazard. Static electricity may build up during conveying and handling

3. Composition/Information on Ingredients

3.1 Substances

Chemical name	**CAS No.**	Concentration (%)
Low density polyethylene	9002-88-4	>99.5%

4. First Aid Measures

4.1 Description of first aid measures

General information	The measures listed below apply to critical situations such as fire, incorrect process conditions, etc. At room temperature the product is neither irritating nor emitting hazardous vapors.

Inhalation	In case of excessive inhalation of fumes that may be generated during heating of this material, move the person to fresh air and get medical attention. Keep person warm, if necessary give artificial respiration or oxygen.
Skin contact	In case of contact with molten product cool rapidly with cold water. Do not try to remove solidified product from the skin as this will damage the skin. Seek medical attention.
Eye contact	Rinse opened eye for 15 minutes under running water. Get medical attention. Do not attempt to remove any material adherent to the eye.
Ingestion	Adverse health effects due to ingestion are not anticipated. Seek medical advice if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	Dust, if generated, can cause mechanical irritation to the eyes. Inhalation of process fumes may affect respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	Control the symptoms and if necessary seek medical attention.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents	Water spray Foam Carbon dioxide (CO_2) Chemical powder
Unsuitable extinguishing agents	Water stream (as it may scatter and spread fire)

5.2 Special hazards arising from the substance or mixture

Special hazards caused products of combustion or resulting gases	Keep away from heat and sources of ignition. Products of combustion: carbon monoxide (CO), carbon dioxide (CO_2) and unburned hydrocarbons (smoke). The formation of hydrocarbons and aldehydes is possible in the initial stages of fire (especially in between 400°C and 700°C).

5.3 Advice for firefighters

Protective equipment	Breathing apparatus and firefighting full-protective clothing.
Additional information	Heat value: 8000 - 11000 kcal/kg.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal safety precautions	Wear proper personal protective equipment during handling with the material. Avoid contact with eyes and skin. Avoid inhalation. Avoid dust formation. Collect spilled polymer to avoid slipping hazard

6.2 Environmental precautions

Measures for environmental protection	Do not flush into surface and ground water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Measures for cleaning/collecting	Sweep into suitable containers for disposal according to local regulations. To avoid dusting do not use aggressive brush or compressed air. Use non-sparking tools and equipment.
Additional information	See sections 8 and 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling

Information for safe handling	Handle in accordance with safety practices. No special requirements necessary if handled at room temperature. Material is in a pellet form, avoid spilling, as it might cause falls. Provide appropriate ventilation and dust collection systems, Small particles formed during storage, handling, processing, or by other means may form combustible dust concentrations in air. Avoid dust accumulation in enclosed space, since in the presence of an ignition source or static discharge (spark) it presents potential dust explosion hazard. If dust is created, safety measures against explosion have to be taken. Electrostatic charge may build during conveying or handling, so all pneumatic transport equipment must be electrically grounded. Do not eat, drink and smoke in work areas and wash hands after use

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers	Store at ambient temperature and atmospheric pressure in original packaging or in a grounded metal container. Polymer burns when ignited, but does not easily ignite. Protect from heat, direct sunlight and strong oxidizing agents. Store under dry conditions.

7.3 Specific end use(s)

Specific applications	See section 1.2 Consult the technical data sheet for the use of this substance.

8. Exposure Controls/ Personal Protection

8.1 Control parameters

occupational exposure limit values	Not established.

8.2 Exposure controls

Appropriate engineering controls	Keep appropriate ventilation in the working area. If this cannot be achieved, enclosed systems, and other engineering controls such as local exhaust ventilation should be used. Wear self-contained breathing apparatus if necessary. Ensure that dust-handling systems are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal protective equipment

General protective and hygienic measures	Do not eat, drink or smoke while working. Wash hands and skin after using the product.

Respiratory protection	Provide system for collecting the dust and vapors which may be formed during the working process. If appropriate ventilation is not available, use suitable respiratory equipment during handling or processing.
Hand protection	Wear gloves that provide thermal protection where there is a potential for contact with heated material.
Eye and face protection	Safety goggles/ face shield should be worn to prevent mechanical injury or other irritation to eyes due to airborne particles or melt which may result from handling or processing this product.
Skin and body protection	Wear appropriate protective clothing. Safety and non-slipping professional boots or shoes.
Environmental exposure controls	Handle the substance according to good industrial hygiene practice Emissions from working with the material should comply with the requirements of local environmental protection legislation. See section 6 for more information.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state and appearance	Solid plastic pellets (granules)
Color	Translucent to white
Odor	Slight / characteristic
Melting Point / range	110-115°C (at atmospheric pressure)
Boiling Point / range	Not applicable
Flash Point	Not applicable
Flammability	Polymer will burn (if ignited).
Autoignition temperature	> 300°C
Decomposition temperature	> 300°C
Danger of explosion	Polymer pellets are not explosive. Note: The minimum explosive concentration for polymer dust varies according to particle size distribution.
Density at 20°C	0.91-0.93 g/cm^3
Solubility in water	Insoluble
Bulk Density at 20°C	400-600 kg/m^3
9.2 Other information	No additional information available

10. Stability and Reactivity

10.1 Reactivity	No known reactivity hazards.
10.2 Chemical stability	The product is stable and is not expected to decompose under normal handling and storage conditions.
10.3 Possibility of hazardous reactions	Reactions with which release excessive pressure or heat, or creating other hazardous conditions are not expected to occur.

10.4 Conditions to avoid	Avoid contact with strong oxidizing agents. Avoid using excessive heat, sparks or flames. Avoid dust formation.
10.5 Incompatible materials	Material may be softened by some hydrocarbons
10.6 Hazardous decomposition products	Hazardous decomposition products are not expected under normal conditions. No dangerous reactions known. Thermal decomposition products may be: carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and alcohols may be formed as a result of thermal decomposition.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	Not classified
Skin corrosion/ irritation	Not a skin irritant
Serious eye damage/irritation	Dust may cause irritation to the eyes.
Respiratory or skin sensitization;	Dust may cause irritation to the skin and respiratory tract Decomposition products may cause headache and/ or irritation to the respiratory tract.
Chronic toxicity	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific Target Organ Toxicity (STOT)-single exposure	The substance or mixture is not classified as specific target organ toxicant, single exposure.
Specific Target Organ Toxicity (STOT) -repeated exposure	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard	Not applicable.

11.2 Information on other hazards

Additional toxicological information	When used and handled according to specifications previously mentioned, the product does not have any harmful effects according to our experience and the information provided to us.

12. Ecological Information

12.1 Ecotoxicity effects	This product has no known eco-toxicological effects.
12.2 Persistence and degradability	This product is not expected to be biodegradable.

12.3 Bioaccumulative potential	This product is not expected to be bioaccumulative.
12.4 Mobility in soil	No data available
12.5 Results of PBT and vPvB assessment	This product is not classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).
12.6 Endocrine disrupting properties	This product does not have endocrine disrupting properties.
12.7 Other adverse effects	The product is insoluble in water.

13. Disposal Considerations

13.1 Waste treatment methods	Recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with any relevant national or regional laws and regulations. Avoid spillage of pellets Do not flush into surface and ground water or sanitary sewer system. This product is recyclable.

14. Transport Information

Transport/Additional information	According to national and international guidelines, which regulate the road-, rail-, air- and sea-transport, this product is classified as not hazardous. It is the responsibility of the transporting organization to follow all applicable laws and regulations relating to the transportation of this material.

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EC regulations	The material is not subject to classification according to EC lists and other open information known to us. Additional regulatory information can be found on Carmel Olefins website in the following link: https://www.carmel-olefins.co.il/Regulatory-Data-Sheets
15.2 Chemical safety assessment	No information available.

16. Other Information

Further information	This safety data sheet is issued in accordance with Regulation (EC) No 1907/2006, and following amendments. Please contact your local sales agent for additional technical information.

Disclaimer

Information supplied in this safety data sheet is based upon our best knowledge, and intended to provide general guidelines and recommendations for safe handling, processing, usage, storage, transport, and disposal of the product. This information is accurate and reliable as of the date of publication. It should not be interpreted as a warranty for specific product characteristics.
Regulatory requirements are subject to change and may vary for different states. It is the user's responsibility to ensure that beyond providing-conditions for proper and safe use of this product, his activities comply with all federal, state, provincial or local laws.
Carmel Olefins Ltd. takes no responsibility for inappropriate use, processing or handling by purchasers and users of the product

Customer Notice:
Carmel Olefins recommends its customers to review both their manufacturing processes and their applications of Carmel Olefins products to ensure that Carmel Olefins products are not used in ways for which they are not intended or tested. Carmel Olefins technical service department is available to answer your questions at techserv@caol.co.il

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End of Material Safety Data Sheet