



POLYETHYLENE ICSC: 1488
 HDPE
 LDPE
 Ethene, homopolymer October 2004
 Ethylene polymers
 PE

CAS #: 9002-88-4

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Finely dispersed particles form explosive mixtures in air.	NO open flames. Closed system, dust explosion-proof electrical equipment and lighting. Prevent deposition of dust.	Use water spray, powder, foam, carbon dioxide.

	SYMPTOMS	PREVENTION	FIRST AID
Inhalation	Cough.	Avoid inhalation of dust.	Fresh air, rest.
Skin			Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Wear safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion		Do not eat, drink, or smoke during work.	

SPILLAGE DISPOSAL	CLASSIFICATION & LABELLING
Sweep spilled substance into covered suitable, labelled containers. If appropriate, moisten first to prevent dusting. Personal protection: particulate filter respirator adapted to the airborne concentration of the substance.	According to UN GHS Criteria Transportation UN Classification
STORAGE	
Separated from incompatible materials. See Chemical Dangers.	
PACKAGING	

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PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance WHITE SOLID IN VARIOUS FORMS. Physical dangers Dust explosion possible if in powder or granular form, mixed with air.	Formula: (C ₂ H ₄) _n Molecular mass: variable (polymer) Melting point: 85-140°C See Notes. Density: 0.91-0.96 g/cm ³ See Notes.
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generates fire and explosion hazard. Reacts violently with fluorine. Reacts with strong acids and strong oxidants.

See Notes.
Auto-ignition temperature: 330-410°C
See Notes.

EXPOSURE & HEALTH EFFECTS

Routes of exposure

Effects of short-term exposure

Inhalation risk

A nuisance-causing concentration of airborne particles can be reached quickly, especially if powdered.

Effects of long-term or repeated exposure

OCCUPATIONAL EXPOSURE LIMITS

ENVIRONMENT

NOTES

LDPE means Polyethylene with low density; HDPE means Polyethylene with high density.
Physicochemical properties vary depending upon the molecular mass.
Thermal degradation starts at 290°C.
The PE products are available in large selection of various forms, due to additives used in the manufacture.
The additives can influence the physical and toxicological properties of this substance.

ADDITIONAL INFORMATION

EC Classification

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See Also:
[Toxicological Abbreviations](#)