91 Fitchburg Road
Ayer, MA 01432
978/772-0764

PolyOne

MATERIAL SAFETY DATA SHEET

ALL GRADES OF GENERIC PRIME POLYETHYLENE
(THIS COVERS HDPE, LDPE, & LLDPE)

Effective Date: April 15, 2003
MSDS: 004-1-2003

Important:

PolyOne Distribution urges each customer or recipient of this Material Safety Data Sheet to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

To promote safe use and handling of this product, each customer or recipient should (1) notify its employees, agents, contractors, and others whom it knows or believes will use this material, of the information on this MSDS and any other information regarding hazards or safety, (2) furnish this same information to each of its customers for the product, and (3) request its customers to notify their employees, customers, and other users of the product of this information.

I. IDENTIFICATION

PRODUCT GROUP: Polyethylene

II. PHYSICAL DATA

Physical Form: Solid
Color: Varies with formulation
Odor: Odorless
Boiling Point: N/A
Softening Point: Varies with formulation
Specific Gravity: <1
Evaporation Rate: N/A
Vapor Density: Negligible
Solubility in Water: Insoluble

III. HEALTH HAZARD DATA

Effects of Exposure: Occupational exposure to this material has not been reported to cause significant adverse health effects.

Eye Contact: Not expected to cause significant eye irritation.. It is good industrial

practice to minimize eye contact. ANSI approved safety glasses are recommended.

Skin: Essential non-irritating to the skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns. It is recommended that gloves should be worn to protect against thermal burns. No adverse effects anticipated by skin absorption.

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Inhalation: Fumes may cause respiratory tract irritation..

Carcinogenicity: None

IV. FIRST AID MEASURES

Eye: Flush eyes with plenty of water. If wearing contact lenses, remove lenses after a minute or two of flushing then continue flushing for a few more minutes.

Ingestion: Contact a physician.

Inhalation: Move to fresh air. If experiencing breathing difficulty, get medical attention.

Skin: If molten material comes in contact with the skin, cool under ice water or a running stream of water. Do not apply ice. DO NOT attempt to remove the molten material from the skin. Removal could cause severe tissue damage.

Note to Physician: Treat burns as any thermal burn after decontamination. No specific antidote.

V. FIRE FIGHTING MEASURES

Flash Point: >625°F
Flammable Limits LEL: N/A
UEL: N/A
Auto-ignition Temperature: > 675°F

Dust Explosions: Mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate.

Hazardous Combustion Products: Combustion products may include carbon monoxide, carbon dioxide, ketones, acrolein, formaldehyde, aldehydes .

Extinguishing Media: Water fog or fine spray, dry chemical fire extinguishers,Carbon Dioxide fire extinguishers, and foam.

Special Fire Fighting Procedures. Full emergency equipment including self-contained breathing apparatus should be worn by firefighters. During a fire irritating and toxic gases and aerosols may e generated by the thermal decomposition and combustion..

VI. ACCIDENTAL RELEASE MEASURES:
SPILL OR LEAK PROCEDURES: Pellets or beads may present a slipping hazard. Keep out of irrigation ditches, sewers, and waterwarys. Sweep up and collect in suitable containers.

VII. HANDLING AND STORAGE

Precautions to be taken:

Handling: When handling flaked material or during secondary operations, vent storage bins, conveyors, dust collectors, etc. Ground handling equipment. Keep open flames, sparks and heat away from dusty areas. Maintain highest standards of housekeeping to prevent accumulation of dust.
Storage: Material should be stored in a clean, dry environment in sealed containers. Material must be dried before processing.

VIII. PERSONAL PROTECTION
Ventilation: Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. Local mechanical exhaust ventilation should be used at sources of air contamination, such as open process equipment, or during purging operations, to capture gases and fumes that may be emitted. Standard reference sources regarding industrial ventilation (i.e.) ACGIH Industrial Ventilation) should be consulted for guidance about adequate ventilation.

Respiratory Protection: NIOSH/MSHA approved dust respirator recommended if the airborne dust concentration is near or exceeds the nuisance dust exposure limits. If ventilation is not sufficient to control processing gases and fumes, a NIOSH approved respirator should be selected and worn based on contamination levels found in the workplace.

Eye Protection: Safety glasses recommended.

Skin Protection: Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates also recommended. Heat protective clothing should be worn when handling heated materials.

IX. STABILITY AND REACTIVITY
Stability: Stable
Incompatibility: None known
Conditions to Avoid: Keep away from heat, sparks & flames.

Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: By fire or thermal decomposition: hydro carbons, alcohols, aldehydes, acids, carbon dioxide, carbon monoxide, ketones,

X. TOXICOLOGICAL INFORMATION

Product may contain dust or particulates that may cause eye irritation or abrasion.

XI. DISPOSAL CONSIDERATIONS

Waste disposal method: Material may be incinerated or landfilled in compliance with federal, state, and local environmental control regulations.

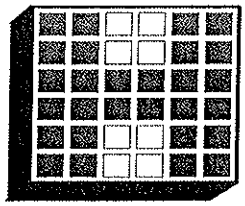
XII. TRANSPORT INFORMATION

DOT Status: Not regulated

The opinions expressed are those of qualified experts within PolyOne. We believe that the information contained is current as of the date of the Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of PolyOne Distribution, it is the user's obligation to determine the conditions of safe use of the product.

Blow Molding Resin

M. Holland Company



HD100

High Density Polyethylene

---

* High Melt Strength
* Good ESCR/Stiffness Ratio
* Good Trimming Characteristics
* No slip or antiblock additives
* Household/Industrial Chemical Packaging
* Food Packaging
* Coolers/Ice Chests
* Sheeting and Vacuum Forming

PROPERTY	TEST METHOD	UNITS	NOMINAL VALUES
Melt Index	ASTM D1238	g/10 min	0.35
Density	ASTM D792	g/cc	0.954
Tensile Strength at Yield	ASTM D638	psi	4,000
Elongation at Break	ASTM D638	%	550
Flexural Modulus	ASTM D790	psi	185,000
Vicat Softening Point	ASTM D1525	°F	260

M. HOLLAND COMPANY
400 Skokie Blvd., Suite 600 Northbrook, IL 60062
Phone: 800/872-7370 Fax: 847-272-0525

PRIDE IN PLASTICS

1/27/2010