



BD Biosciences Labware

Material Safety Data Sheet Catalog Number(s)

352001, 352003, 352005, 352006, 352017, 352025, 352027, 352030, 352032, 352037, 352045, 352051, 352054, 352057, 352058, 352059, 352063, 352070, 352073, 352074, 352095, 352096, 352097, 352098, 352099, 352235, 353007, 353008, 353026, 353033, 353068, 353069, 353088, 353090, 353091, 353092, 353093, 353095, 353096, 353097, 353102, 353103, 353104, 353180, 353181, 353182, 353292, 353492, 353493, 353495, 353501, 357102, 357103, 357104, 357105, 357106, 357107, 357109, 357111, 358027, 353074, 353079

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: Polyethylene (High Density, Low Density, Linear Low Density)

Synonyms:

Chemical Family:

Chemical Formula:

Manufacturer: Becton Dickinson and Company **Division:** BD Biosciences - Labware

MSDS Number(s): MR000372 **Address:** 296 Concord Road

City: Billerica **State:** Massachusetts **Zip Code:** 01821

Emergency Phone: Day: 201-847-4267; After hours: 201-847-6431

Other Calls: 201-847-4000, 800-333-4813 **MSDS Prepared By:** Case Consulting Laboratories, Inc.

Effective Date:

SECTION 2 - COMPOSITION INFORMATION INGREDIENTS

| <u>Ingredient Name</u> <u>Common Name</u> | <u>CAS Number</u> | <u>Percent (wt)</u> | <u>Wgt Vol</u> | <u>Hazardous</u> |
|----------------------------------------------|-------------------|---------------------|----------------|------------------|
| Polyethylene | 9002-88-4 | 100.0 | | |

All grades of polyethylene are FDA approved and are not considered hazardous materials under the OSHA Hazard Communication Standard.

OSHA PEL Exposure Limits:

ACGIH TLV Exposure Limits:

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:

Relevant Route(s) of Exposure: Eyes, Skin, Inhalation, Ingestion.

Signs and Symptoms of Exposure (Acute): EYES/SKIN: The cool material is not expected to cause eye/skin irritation. However, thermal burns may result from contact with the hot material. The degree of injury will depend on the amount of material that contacts the eyes/skin and the speed and thoroughness of the first aid treatment. Signs and Symptoms of Exposure: May include pain, tears, swelling, redness and blurred vision. If absorbed through the skin, this substance is considered practically non-toxic to internal organs.



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SECTION 3 - HAZARDS IDENTIFICATION - (CONT.)

Signs and Symptoms of Exposure (Acute) Cont.: May include pain, discoloration and swelling. **INHALATION:** Fumes from the hot material can be unpleasant and may produce nausea and irritation of the upper respiratory tract. **INGESTION:** If swallowed, this substance is considered practically non-toxic to internal organs.

Chronic Effects:

Medical Conditions Generally Known to be Aggravated by Exposure to the Material:

Potential Health Effects:

| | | | | | |
|-------------------------|------------------|--------------------|---------------------|------------------|---------------------|
| Eyes: | | Skin: | | | |
| Ingestion: | | Inhalation: | | | |
| SARA Hazards: | Acute: No | Chronic: No | Reactive: No | Fire: No | Pressure: No |
| Carcinogenicity: | NTP: No | IRAC: No | OSHA: No | ACGIH: No | Other: |

SECTION 4 - FIRST AID MEASURES

Eyes: If hot melted material should splash into the eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses if worn; seek medical attention.

Skin: If hot melted material contacts skin, quickly cool in water. Seek medical attention for extensive burns. Do not attempt to peel the solidified material from the skin or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

Ingestion: Not expected to be an ingestion problem; no first aid procedures are required.

Inhalation: If respiratory discomfort or irritation occurs, move the person to fresh air. Seek medical attention if discomfort or irritation persists.

Antidotes:

Notes to Physicians:

SECTION 5 - FIRE FIGHTING PROCEDURES

| | | |
|------------------------|----------------------|------------------------|
| NFPA & HMIS | Health: 0 | Flammability: 1 |
| Codes: | Reactivity: 0 | Other: |

Flammable Limits in Air: **Upper Limit:** NDA **Lower Limit:** NDA

Flash Point Value: NDA **Method Used:**

Auto-Ignition Value: NDA

Extinguishing Media: NDA

Fire Fighting Instructions: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment including self-contained breathing apparatus.

Unusual Fire and Explosion Hazards:

Flammability Classification:

Propagation or Burning Rate of Solid Materials:



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SECTION 5 - FIRE FIGHTING PROCEDURES - (CONT.)

Known or Anticipated Hazardous Products of Combustion: Normal combustion forms CO₂, water vapor and may produce carbon monoxide and/or low molecular weight hydrocarbons.

Properties of Both Flammable and Nonflammable Material that may Initiate or Uniquely Contribute to the Intensity of a Fire:

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: If liquid material is spilled, allow it to cool and solidify before proceeding with disposal methods.

SECTION 7 - HANDLING AND STORAGE

Handling and Storage: For manufacturing facilities only - Bulk storage of polyethylene pellets may result in the accumulation of ethylene gas with possible explosion potential. Concentrations of ethylene gas must be kept below the lower explosive limit of 2.7%. Avoid breathing vapors or fumes which may be released during thermal processing. Airborne dust concentrations above 20 mg/L may create a dust explosion hazard. Spilled pellets may create a slipping hazard.

Precautionary Label Statements:

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Engineering Controls: No special ventilation is usually required. However, if operating conditions create high airborne concentrations of this material, special ventilation may be needed. If thermal processing results in irritating fumes, special ventilation may be necessary to ensure that exposure standards are not exceeded. If handling results in dust generation, special ventilation may be needed to ensure that dust exposure does not exceed the OSHA PEL for nuisance dust.

Ventilation Needs:

Personal Protective Equipment

Eye/Face Protection: If used at elevated temperatures, wear chemical goggles, a face shield or safety glasses.

Skin Protection: If used at elevated temperatures, skin contact can be minimized by wearing protective clothing.

Respiratory Protection: No special respiratory protection is normally required. However, if operating conditions create high airborne concentrations, the use of an approved respirator is recommended.

Other Protective Clothing or Equipment: None

Exposure Guidelines:

Work Hygienic Practices:

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: NDA

Melting Point: NDA

Freezing Point: NDA

Physical State:

Viscosity @ ??°C:

Molecular Weight:

pH: NDA

Concentration:

Weight per Gallon:

Evaporation Rate (=1): 0

Vapor Pressure @ °C: NDA



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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES - (CONT.)

Vapor Density (air=1): NDA

Specific Gravity: 0.91-1.02

Percent Volatile by Volume: 0

Theoretical VOC Content % by Wt.:

Solubility in Water: Insoluble

Reactivity in Water:

Appearance: Translucent, colorless pellets

Odor:

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: NDA

Incompatibility with Other Materials: May react with strong oxidizing agents such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: NA

Hazardous Polymerization: No

Conditions to Avoid (Polymerization):

SECTION 11 - TOXICOLOGICAL INFORMATION

LD₅₀ Value

Unit

LD₅₀ Animal

Routes

LD₅₀ Component

LC₅₀ Value

Unit

LC₅₀ Animal

Routes

LC₅₀ Component

Toxicological Information: This product contains polyethylene. During thermal processing, polyethylene, like all plastics, can degrade. The three variables which control its degradation are the temperature, the length of time at that temperature and the amount of oxygen available. Depending on the local processing conditions, a variety of low molecular weight hydrocarbons, alcohols, aldehydes, acids and ketones can be formed. These materials are respiratory irritants.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Fish or birds may eat pellets which may obstruct their digestive tracts.

Environmental Fate: NDA

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Considerations: Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

SECTION 14 - TRANSPORTATION INFORMATION

Transportation and Hazardous Materials Description: May not apply to all shipping situations. Consult 49 CFR or appropriate dangerous goods regulations for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

Proper Shipping Name:

