

SECTION 1: PRODUCT AND COMPANY INFORMATION

Material Difference Technologies LLC, 1401 Manatee Ave W, Suite 1015, Bradenton, FL 34205 (888) 818-1283

Product Family: Polymer
Trade Names: Polyethylene (PE) resin
Recommended Uses: Industrial applications

**Emergency Phone Number
 for Spill, Leak, Fire, Exposure, or Accident
 Call CHEMTREC Day or Night
 1-800-424-9300 / +1 703-527-3887 CCN702922**

SECTION 2: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW			
GHS CLASSIFICATION	Non-hazardous	HMIS	
Physical State	Solid	HEALTH	0
Color	White to yellowish	FLAMMABILITY	1
Odor	Odorless or slight odor	PHYSICAL HAZARD	0
PERSONAL PROTECTION			See Section 8

Primary Routes of Exposure Eyes or skin contact

Potential Health Effects

Acute Effects

Inhalation Health injuries not expected. Not a probable route of exposure under ordinary conditions.

Skin contact Health injuries not expected. Possible mechanical irritation.

Eye contact Health injuries not expected. Possible mechanical irritation from dust or powder.

Ingestion Health injuries not expected. Not a probable route of exposure.

Chronic effects Ongoing exposure may aggravate acute effects

Carcinogenicity See Section 11

Medical conditions aggravated by long term exposure Ongoing exposure may aggravate acute effects .

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component:	CAS Number:	Percentage:
Ethene, homopolymer	CAS# 9002-88-4	>98 (+/-)
1-Butene, polymer with ethene	CAS# 25087-34-7	>90 (+/-)
1-Hexene, polymer with ethene	CAS# 25213-02-9	>90 (+/-)

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: FIRST AID MEASURES

Skin Contact: If burned by contact with hot material, flush skin immediately with large amounts of cold water. If possible, submerge area in cold water. No attempt should be made to detach polymer adhering to the skin or to remove clothing attached with molten material. Thermal burns require immediate medical attention. Cold material: Wash with soap and water.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation: If affected by fumes from heated material, remove from source of exposure and move the affected person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 5: FIRE FIGHTING MEASURES

Use water fog, dry chemical, carbon dioxide or foam as appropriate for materials in surrounding fire. Avoid using direct streams of water on molten burning material as it may scatter and spread the fire. Melts in proximity to fires resulting in slippery floors and stairs. Static charges or on powders or powders in liquids may ignite combustible atmospheres. Airborne dusts of this product in an enclosed space and in the presence of an ignition source may constitute an explosion hazard. See NFPA Bulletin 654, "Standard for the Prevention of Fire and Dust Explosions from the Manufacturing Processing, and Handling of Combustible Particulate Solids," for safe handling procedures. As in any fire, wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing. Watch footing on floors and stairs because of possible spreading of molten material.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Refer to Section 8: Exposure Control and Personal Protection

Emergency Action:

No special environmental precautions required.

Spill/Leak Procedure:

Containment of this material should not be necessary. Sweep up or gather material and place in appropriate container for disposal.

SECTION 7: HANDLING AND STORAGE

Refer to Section 8: Exposure Control and Personal Protection

Handling:

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with eyes. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. Airborne dusts are potentially explosive. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654).

Storage:

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Incompatibilities: Strong oxidizing agents

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

Engineering Controls:

Use recommended safe handling practices to minimize unnecessary exposure. General room ventilation is adequate for storage and ordinary handling. Use local exhaust at points of fume generation or if dusty conditions prevail.

Personal Protective Equipment:

Wear safety glasses with side shields or chemical goggles to prevent eye contact. Have eye-washing facilities readily available where eye contact can occur. Do not wear contact lenses when working with this substance. Wear impervious gloves and protective clothing to prevent skin contact. Use NIOSH or MSHA approved equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Not determined	Vapor Density (Air = 1):	Not applicable
Specific Gravity (@ 23°C):	0.8 - 0.970	Appearance:	Solid
Melting Point:	230 – 332.6 °F	Odor:	Odorless or slight odor
Evaporation Rate:	Not applicable	pH:	Not applicable
Vapor Pressure:	Not applicable	Auto Ignition Temperature:	340 °C
Odor Threshold:	Not determined	Viscosity (SUS @ 100°F):	Not applicable
Solubility in water:	Insoluble in water	Flash Point (Closed Cup):	Not applicable
Decomposition Temperature:	> 300 °C (> 572 °F)	Lower: Not applicable	Upper: Not applicable
Ventilation: Flammability Limits in Air (% by Volume)			

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

Not reactive under normal conditions of storage and use.

Chemical Stability:

Stable under normal conditions of storage and use. Avoid exposure to open flame or exceeding recommended processing conditions.

Stability/Incompatibility:

Avoid contact with strong oxidizers, strong acids or flammable materials.

Conditions to Avoid:

Avoid dust-air mixtures or static charge buildup. Avoid contact with incompatible materials such as oxidizing agents or amines.

Hazardous Reactions/Decomposition Products:

Burning can produce carbon monoxide and/or carbon dioxide and other harmful products. The major decomposition products are low molecular weight oligmers (C6-18) of polypropylene. Degradation products may include trace amounts of acrolein, formaldehyde, aldehydes, and other organic vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Routes of entry anticipated: Oral, Dermal, Inhalation
Acute Effects:	This product is not acutely toxic. Oral Toxicity LD50 Not Available; Inhalation Toxicity LD50 Not Available.
Chronic Effects:	None known.
Symptoms:	Irritation of eyes and skin.
Carcinogenicity:	This product has not been found to be carcinogenic by the NTP, ACGIH, IARC or OSHA.
Further information	This product has no known adverse effect on human health.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	No known or expected ecotoxicity
Persistence and Biodegradability:	Not determined.
Bioaccumulative Potential:	Not determined.
Mobility in Soil:	Not determined

SECTION 13: DISPOSAL CONSIDERATION

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

Refer to Section 6: Accidental Release Measures

D.O.T. 49 CFR 172.101:	Not regulated
TDG:	Not regulated
UN Proper Shipping Name/Number:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated

SECTION 15: REGULATORY INFORMATION

SARA TITLE III Information:

Hazard categories for the Superfund Amendments and Reauthorization Act (SARA) Section 311/312/313 (40 CFR 370):

Immediate Hazard: No **Delayed Hazard:** No **Fire Hazard:** No **Pressure Hazard:** No **Reactivity Hazard:** No

SECTION 16: OTHER INFORMATION

Notice: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet; however, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In additional, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

Prepared By: NAH QA

Revision: New

Issue Date: 09.01.2023