

UHMW Material Safety Data Sheet



I. General Information		
Chemical Name & Synonyms Ultra -High Molecular Weight Polyethylene	Trade Name & Synonyms TIVAR 1000, Tivar Uniblend, Tivar Recycled	
Chemical Family Linear High Density Polyethylene	Formula (ch ₂ -ch ₂) _n	
Proper DOT Shipping Name N/A	DOT Hazard Classification N/A	
Manufacturer Poly Hi Solidur Inc.	Manufacturer's Phone Number (260) 479-4274	
Manufacturer's Address 2710 American Way, Fort Wayne, IN 46809	Chemtrec Phone Number 1-800-424-9300	
II. Ingredients		
Principal Components	Percent	Threshold Limit Value (Units)
Polyethylene (9002-88-4)	>99%	10 mg/m ³ (total dust)
III. Physical Data		
Boiling Point (Deg. F.) N/A	Specific Gravity (H ₂ O=1) .93 - .94	
Vapor Pressure (mm Hg) N/A	Percent Volatile By Volume (%)	
Vapor Density (Air=1) N/A	Evaporation Rate (Air =1) N/A	
Solubility in Water Negligible	pH N/A	
Appearance & Odor Waxy Solid with waxy odor. White, black, or green color.		
IV. Fire & Explosion Hazard Data		
Flash Point (Test Method) - >350°C (662 ° F.) (ASTM -D-1929 Method B)(Setchkin)		
Auto Ignition Temperature - >350°C (662 ° F.)		
Flammable Limits N/A	LEL N/A	UEL N/A
Extinguishing Media Water, Foam, Carbon Dioxide, Dry Chemical		
Special Fire Fighting Procedures Standard for Class A fire.		
Unusual Fire & Explosion Hazards Dust is flammable when finely divided (less than 200 mesh) and suspended in air.		

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V. Health Hazard Data	
Carcinogen - NTP Program NO	Carcinogen - IARC Program NO
Symptoms of Exposure None Known	
Medical Conditions Aggravated By Exposure None known, however, seek medical attention if constant irritation occurs. If thermal decomposition occurs, upper respiratory, eye, nose, and throat irritation may result.	
Primary Route(s) of Entry Inhalation of particulates.	
Emergency First Aid Molten material. If molten material comes in contact with the skin, cool under running water. Do not attempt to remove the molten material from the skin. Get medical attention.	
VI. Reactivity Data	
STABILITY <input type="checkbox"/> Unstable <input checked="" type="checkbox"/> Stable	<u>Conditions To Avoid</u> None Known
INCOMPATIBILITY Hazardous <input type="checkbox"/> May Occur Polymerization <input checked="" type="checkbox"/> Will Not Occur	<u>Materials To Avoid</u> Strong oxidizing agents. <u>Conditions To Avoid</u> None Known
Hazardous Decomposition Products Carbon Monoxide, Carbon Dioxide, selected Alkanes and Aldehydes including Acrolein and Formaldehyde.	
VII. Environmental Protection Procedures	
Spill Response Sweep up for Disposal or reuse.	
Waste Disposal Method Incineration or landfill - dispose of in accordance with Federal, State and Local regulations.	
VIII. Special Protection Information	
Eye Protection Glasses with side shields.	Skin Protection
Respiratory Protection (Specific Type): NIOSH approved dust respirator recommended. If material is being burned wear an organic respirator.	
Ventilation Recommended: Local ventilation in dusty conditions, or if thermal decomposition occurs.	
Other Protection Gloves and protective garments when handling molten material.	

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IX. Special Precautions/Information	
Hygienic Practices In Handling & Storage	Wash with soap and water.
Precautions For Repair & Maintenance Of Contaminated Equipment	Eliminate ignition sources.
Other Precautions	Store in a sprinkler protected warehouse. Since TIVAR 1000, TIVAR Recycled, TIVAR Uniblend are polyethylene, they will burn with a hot flame if ignited. Avoid contact with ignition sources such as open flames. Keep a fire extinguisher near if welding is done in the area of TIVAR 1000, TIVAR Recycled, and TIVAR Uniblend. If a heat source is present, keep the area well ventilated.
NFPA Code: Fire 1, Health 1, Reactivity 0	HMIS Code: Fire 1, Health 0, Reactivity 0
X. Regulatory Information	
OSHA Status: Polyethylene is not considered hazardous under OSHA.	
TSCA Inventory Status: All ingredients are listed.	
CERCLA Reportable Quantity (RG): None	
SARA Title III:	Section 302/304.No extremely hazardous substances Section 311/312.No reporting requirements although it is suggested that storage of >10,000 lbs of polyethylene in one facility should be listed on a Tier II report. Section 313: No reporting requirements.

Hazard data contained herein was obtained from raw material suppliers. The information presented is believed to be factual, as it was derived from the works and opinions of persons believed to be qualified. However, no facts contained in the information are to be taken as a warranty, or representation, for which Poly Hi Solidur, Inc. bears legal responsibility. The user should review any recommendation in the specific context of the intended use to determine if they are appropriate.