QUADRANT
ENGINEERING PLASTIC PRODUCTS

MATERIAL SAFETY DATA SHEET

Date last revised 9/11/08 By M. Lykins **MSDS-04**

I. Chemical Product and Company Identification

Chemical Name & Synonyms **Ultra-High molecular Weight Polyethylene**	**Trade Name & Synonyms** **TIVAR® UV**
Chemical Family **Linear High Density Polyethylene**	**Formula** **(ch2-ch2)n**
Proper DOT Shipping Name: N/A	**DOT Hazard Classification: N/A**
Manufacturer: Quadrant EPP USA, Inc. **2120 Fairmont Avenue.** **Reading, PA 19605** **(610) 320-6600**	**Chemtrec Phone Number** **1-800-424-9300**

II. Ingredients

Principal Components	Percent	Threshold Limit Value	OSHA PEL
Polyethylene (9002-88-4)	>90	10 mg/m3	15 mg/m3
Proprietary Additives	<1.0	N/A	

III. Physical Data

Boiling Point (Deg. F.) **N/A**	**Specific Gravity (H20=1)** **.935 - .945**
Vapor Pressure (mm Hg) **N/A**	**Percent Volatile By Volume (%)** **<0.4**
Vapor Density (Air=1) **N/A**	**Evaporation Rate (Air =1)** **N/A**
Solubility in Water **Negligible**	**pH** **N/A**
Appearance & Odor **Waxy solid**	

IV. Hazard Identification/Fire & Explosion Hazard

Flash Point (Test Method) - >350°C (662° F.) (ASTM-D-1929 Method B)(Setchkin)
Auto Ignition Temperature - >350°C (662° F.)

Flammable Limits	LEL	UEL
N/A	N/A	N/A

Extinguishing Media
Water, Foam, Carbon Dioxide, Dry Chemical

Special Fire Fighting Procedures
Firefighters should be equipped with positive pressure, self-contained breathing apparatus in enclosed area.
NFPA Code: Fire 1, Health 1, Reactivity 0
HMIS Code: Fire 1, Health 0, Reactivity 0

Unusual Fire & Explosion Hazards: Special conditions to avoid
Dust is flammable and explosive when finely divided and suspended in air.

QUADRANT
ENGINEERING PLASTIC PRODUCTS

MATERIAL SAFETY DATA SHEET

MSDS-04

V. Health Hazard Data

Carcinogen - NTP Program	Carcinogen - IARC Program
NO	NO

Route of Exposure

Eye contact

Physical health Hazards:

Dust may form explosive mixtures with air. Avoid dust formation and control ignition sources. Polyolefin dust particles suspended in air are combustible and may be explosive. Keep away from heat, sparks, flame, and other ignition sources. Prevent dust accumulations and dust clouds. Employ grounding, venting, and explosive relief provisions in accordance with accepted engineering practices and NFPA provisions in any process capable of generating dust and/or static electricity. Explosion hazards apply only to dusts, not granular forms of this product. See also Special Precautions section below.

Signs and Symptoms of Acute Exposure:

Molten polymer may cause thermal burns. At process temperatures, irritating fumes may cause soreness of the nose and throat. Mechanical irritation is possible.

Primary Route(s) of Entry

Inhalation of particulates.

Emergency First Aid

Inhalation: If symptoms are experienced, move victim to fresh air. If symptoms persist, obtain medical attention.

Eye Contact: Wash eyes with clean, low pressure water. If irritation persists, seek medical advice.

Skin Contact:

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 immediately.

VI. Reactivity Data

STABILITY ___ **Unstable**	**Conditions To Avoid - None Known**
_X_ Stable	**Materials To Avoid - None Known**
INCOMPATABILITY	**Conditions To Avoid - None Known**
Hazardous ___ May Occur	
Polymerization _X_ Will Not Occur	

Hazardous Decomposition Products: Aliphatic Hydrocarbons

VII. Environmental Protection Procedures

Spill Response - Sweep up for disposal.

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: When handling molten material protective clothing such as long sleeves or laboratory coat should be worn. Use heat-resistant gloves, boots and face 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.

Handling: The handling of powder in both loading and unloading operations, as well as fabrication, may cause dust to be formed, and necessary precautions for personal protection (See Section VIII) should be used. As with all finely divided materials, precautions should be taken to avoid inhalation and eye contact.

IX. Special Precautions/Information

Hygienic Practices In Handling & Storage: Wash with soap and water.

Precautions For Repair & Maintenance Of Contaminated Equipment: Eliminate ignition sources.

Transfer from storage with a minimum amount of dusting. Ground all transfer, blending, and dust collecting equipment to prevent static sparks in accordance with NFPA 70 "national Electric Code". Review and comply with all relevant NFPA provisions, including but not limited to NFPA 484 and NFPA 654 related to combustible dust hazards. Remove all ignition sources from material handling, transfer, and processing areas where dust may be present. Local exhaust ventilation should be provided in work area.

Other Precautions

Store in a sprinkler protected warehouse. Since TIVAR® products 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® products. If a heat source is present, keep the area well ventilated.

X. Regulatory Information

OSHA Status: Polyethlyene is not considered hazardous under OHSA.

TSCA Inventory Status: All ingredients are listed.

CERCLA Reportable Quantity (RQ): 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.

XI. Warning Labels

CAUTION: Please consult the product MSDS sheet for important information.

NFPA Code: Fire 1, Health 1, Reactivity 0

HMIS Code: Fire 1, Health 0, Reactivity 0

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 Quadrant EPP USA, Inc. bears legal responsibility. The user should review any recommendation in the specific context of the intended use to determine if they are appropriate.

N.A.= Not Applicable N.E.= Not Established