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| Material Safety Data Sheet May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910. Standard must be consulted for specific requirements. | | U. S. Department of Labor Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved | | | |
| IDENTITY (As used on Label and List) TMTM 80 EPR PELLETS | | MSDS # 500213 | | | |
| Section I | | | | | |
| Manufacturer's Name Polymeric Inc. | | Emergency Telephone Number (330) 928-2210 | | | |
| Address (Number Street, City, State and ZIP Code) 2828 Second Street | | Telephone Number for Information (330) 928-2210 | | | |
| Cuyahoga Falls, OH 44221 | | Date Prepared 02/01/05 | | | |
| Section II - Hazardous Ingredients/Identity Information | | | | | |
| Hazardous Components (Specific Chemical Identity; Common Name(s)) | | OSHA PEL | ACGIH TLV | Other Limits Recommended | % Optional |
| Tetramethylthiuram Monosulfide CAS# 97-74-5 Possible cancer hazard: May react with nitrosating agents to form nitrosoamines – suspected carcinogens. | | None | None | N/A | 80% |
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| Section III - Physical/Chemical Characteristics | | | | | |
| Boiling Point(F) N/A | | Specific Gravity (H₂O = 1) Approximately 1.2510 | | | |
| Vapor Pressure (mm Hg.) Non Volatile | | Melting Point N/A | | | |
| Vapor Density (AIR = 1) Non Volatile | | Evaporation Rate (Butyl Acetate = 1) N/A | | | |
| Solubility in Water Negligible | | | | | |
| Appearance and Odor Yellow Rubber Pellets | | | | | |
| Section IV - Fire and Explosion Hazard Data | | | | | |
| Flash Point (Method Used) N/A | | Flammable Limits N/D | | LEL N/A | UEL N/A |
| Extinguishing Media Water Fog, Foam, Carbon Dioxide, Dry Chemical. CO ₂ may be ineffective on larger fire due to lack of cooling capacity which may result in reignition. | | | | | |
| Special Fire Fighting Procedures Evacuate unprotected personnel. Firefighters should use full protective gear with self-contained breathing apparatus. Toxic gases will form upon combustion. Fire is accompanied by dense, black smoke with acrid odor. | | | | | |
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(Reproduce Locally)

Section V - Reactivity Data

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|-----------|----------|---|--|
| Stability | Unstable | | Conditions to Avoid Process temperatures above 320 degrees F. |
| | Stable | X | |

Incompatibility (*Materials to Avoid*)

Reacts with strong acids and strong oxidizers.
May create a fire or explosion hazard when mixed with strong oxidizers.
Nitrosating agents.

Hazardous Decomposition or Byproducts

Oxides of carbon, nitrogen and sulfur. Combustion products from rubber, like those from other natural and synthetic materials, must be considered toxic.

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| Hazardous Polymerization | May Occur | | Conditions to Avoid Overheating |
| | Will Not Occur | X | |

Section VI - Health Hazard Data

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|--------------------|----------------------------|-------------------------|----------------------------|
| Route(s) of Entry: | Inhalation? Y Hot fumes | Skin? Y Skin contact | Ingestion? N Not likely |
|--------------------|----------------------------|-------------------------|----------------------------|

Health Hazards (*Acute and Chronic*)

Acute: May cause skin, respiratory, and eye irritation. Possible sensitivity to light may also result. Skin absorption does take place and exposure from any route may result in alcohol intolerance (See Other Precautions). May cause sensitization of the skin and allergic eczema (dry, itchy, scaly skin) in sensitive individuals. Acute poisoning may cause liver and kidney damage.

Other: May affect the erythrocyte count and the hemoglobin content of the blood along with mild swelling of the liver and kidney cells.

Polymer bound compounds preclude the possibility of airborne dust. They also eliminate the problems generally associated with powdered chemicals. Eye, nose and throat irritation from hot fumes.

Note: Talc is applied to the pellets as a partitioning agent. Repeated or prolonged inhalation of the talc may cause scarring of the lungs with shortness of breath and chronic cough.

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|---|-------|--------------------|------------------|
| Carcinogenicity: | NTP?Y | IARC Monographs? Y | OSHA Regulated?N |
| None of the components of this product that are present at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being a carcinogen. | | | |

Signs and Symptoms of Exposure:

At processing temperatures, fumes and vapors that cause irritation to the respiratory tract, eyes, and / or skin are emitted. Typically, these effects are reversible upon removal from exposure and no lasting effects are expected. Most importantly, the potential for irritation will depend upon the effectiveness of the exhaust ventilation in the process area.

HMIS #: Health 2* Fire 1 Reactivity 0 Personal Protective Equipment B

Medical Conditions Generally Aggravated by Exposure:

None reported.

Emergency and First Aid Procedures:

Eyes: Flush with water while holding eyelids open for 15 minutes. If irritation persists, consult a physician.

Skin: Wash with soap and water; remove contaminated clothing. Get medical attention if irritation persists.

Inhalation: Remove victim to fresh air and consult a physician. Give oxygen or artificial respiration if breathing is difficult.

Ingestion: Not expected to be a route of exposure due to the form of the product.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled:

Dispose of contaminated material. Re-use uncontaminated material.

Waste Disposal Method:

Not classified as a RCRA Hazardous material as defined in 40 CFR 261.3. State or local environmental regulations may differ from the federal regulations.

Precautions to Be Taken in Handling and Storing:

Store away from heat and direct sunlight. Wash thoroughly after handling.

Recommended shelf life of one year if stored in a cool, dry, environment.

Other Precautions:

Avoid breathing process fumes.

Use under well-ventilated conditions.

Consumption of alcohol after repeated exposure to TMTM may produce an antabuse effect – violent nausea, vomiting, etc.,. However, due to the form of this product, this effect is not expected.

Section VIII - Control Measures

Respiratory Protection (*Specify Type*):

None required at normal handling temperatures if processing equipment is properly ventilated. If process fumes approach TLV, use a NIOSH approved organic vapor respirator following all the protocols of OSHA's Respiratory Standard (29 CFR 1910.134).

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| Ventilation | Local Exhaust: Recommended at all Process sites with capture velocity of 150 to 200 FPM. | Special: N/A |
| | Mechanical (<i>General</i>): Normally sufficient | Other: N/A |

Protective Gloves:

It is good industrial hygiene practice to wear gloves while handling uncured rubber products to prevent skin contact. Any type of glove should be adequate.

Eye Protection: Safety glasses should provide adequate protection.

Other Protective Clothing or Equipment:

Where contact may occur with hot material, wear thermal resistant hand and arm protection. Long-sleeved clothing is recommended to minimize skin contact.

Work Hygienic Practices:

Avoid repeated or prolonged inhalation of process vapors.