



Radiation Products Design, Inc.
5218 Barthel Industrial Drive
Albertville, MN 55301
www.rpdinc.com

Phone: 800-497-2071 Fax: 763-497-2295

**RPD is an authorized
distributor**

RPD Product Information

Item Number Description

MX1-0813	Matrix Thermo-Shield 8 x 8 x 13
MX1-0813P	Matrix Thermo-Shield 8 x 8 x 13 w/ Portal
MX1-0816	Matrix Thermo-Shield 8 x 8 x 16
MX1-0816P	Matrix Thermo-Shield 8 x 8 x 16 w/ Portal
MX1-1213	Matrix Thermo-Shield 12 x 12 x 13
MX1-1213P	Matrix Thermo-Shield 12 x 12 x 13 w/ Portal
MX1-1216	Matrix Thermo-Shield 12 x 12 x 16
MX1-1216P	Matrix Thermo-Shield 12 x 12 x 16 w/ Portal
MX1-500	Matrix Thermo-Shield 50cc Syringe

MSDS for MATRIX

I. General Information		
Chemical Name & Synonyms Moldable Shielding Material Chemical Family Bismuth & Hydrocarbon Wax Blend Proper DOT Shipping Name N/A Manufacturer Radiation Products Design Manufacturer's Address 5218 Barthel Industrial Drive Albertville, MN 55301	Trade Name & Synonyms MATRIX Thermo-Shield (Cakes, Sticks) Formula Confidential DOT Hazard Classification N/A Manufacturer's Phone Number (763) 497-2071	
II. Ingredients		
Principal Hazardous Components NONE	Percent	Threshold Limit Value (units)
NOTE: Exposure Limit for total Product		ACGIH: 5mg/m ³ for Oil Mist 2mg/m ³ for Wax Fumes
III. Physical Data		
Boiling Point: Greater than 550°F Softening Point: ≈ 115°F Solubility (H₂O): Negligible (Less than 0.1%) Specific Gravity (H₂O=1): 4.19 gm/cc Appearance & Odor: Brown (Red & Silver) - Chocolate odor - Shatters on impact	Evaporation Rate: N/A (Butyl Acetate = 1)	
IV. Fire & Explosion Hazard Data		
Flash Point (Test Method) 505°F C.O.C. Flammable Limits N/A Extinguishing Media Foam, Dry Chemical, CO ₂ . Do not use direct stream of water. Special Fire Fighting Procedures Do not enter confined fire space without full bunker-gear, including a positive-pressure NIOSH-approved self-contained breathing apparatus. Cool area with water fog. Unusual Fire & Explosion Hazards Dense smoke may be generated while burning. CO, CO ₂ , and other oxides may be generated as products of combustion.		

V. Health Hazard Data

OSHA Permissible Exposure Limit N/A	ACGIH Threshold Limit Value N/A
Carcinogen - NTP Program None	Carcinogen - IARC Program None

Symptoms of exposure
Slight irritation of eyes and mild upper respiratory irritation if exposed to fumes.
Molten material burns skin on contact. Ingestion information is not available.

Medical Conditions Aggravated by exposure
N/A

Primary Route(s) of Entry
Inhalation, Eyes, and Skin

Emergency First Aid - Molten or burning product.
If molten wax strikes skin, drench or immerse area in water to assist cooling. Apply ice water or ice packs to burned area. Do not try to remove wax from a burn after it has cooled. See a physician.
If fumes are inhaled, remove victim to fresh air. If fumes get in eyes, flush with copius amounts of water. Seek medical attention.

VI. Reactivity Data

Stability: Stable	Hazardous Polymerization: Will not occur
Conditions to avoid: Heat, Flame, Other sources of ignition.	
In compatibles: Strong acids, strong oxidizing agents, chlorine, fused ammonium nitrate, nitrosyl fluoride, iodine pentaflor	

VII. Environmental Protection Procedures

Spill Response:
May burn although not readily ignitable. Use caution when cleaning up a large molten spill. For small spills, allow wax to cool and remove as a solid.

Waste Disposal Method:
Place in appropriate disposal facility in compliance with federal, state, and local regulations.

VIII. Special Protection Information

Eye Protection Safety glasses with side shields.	Skin Protection Gloves while handling liquid.
Respiratory Protection (Specific Type) N/A at ambient conditions; otherwise NIOSH-approved respirator.	Ventilation Recommended Local is sufficient.

IX. Special Precautions

Hygienic Practices in Handling & storage:
Minimize breathing of vapors, fumes, or mist. Avoid contact with molten material.

Precautions for repair & maintenance of contaminated equipment:
N/A

Other Precautions:
Keep container tightly closed. Store in a cool, dry, well-ventilated area away from heat, sparks, or flame.