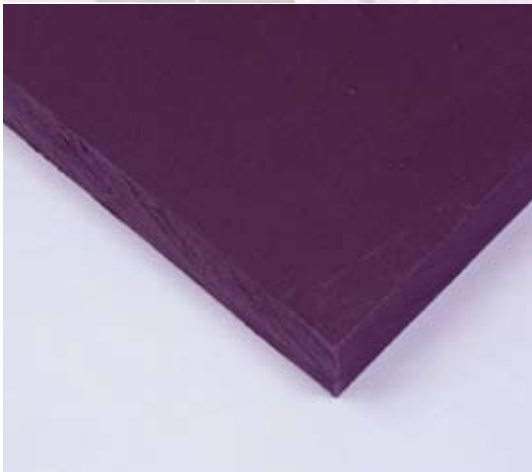


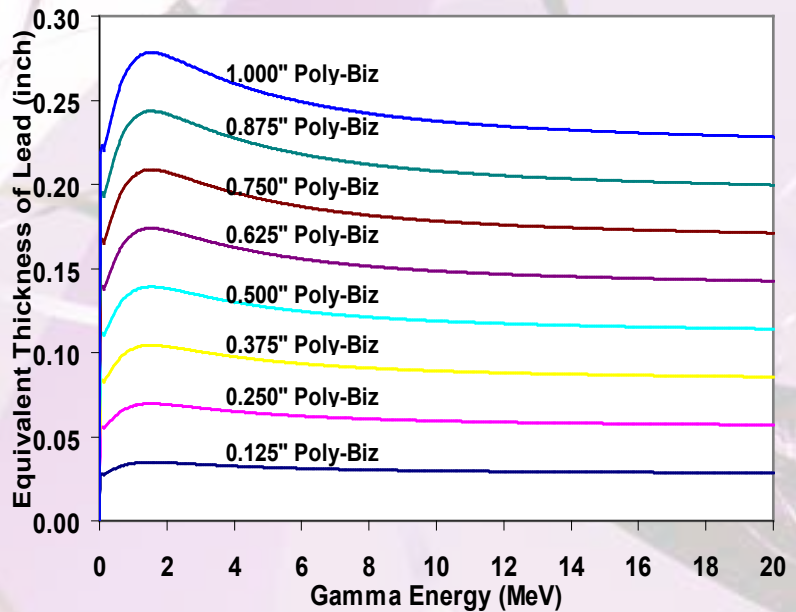
SWX-217

Poly-BIZ



SWX-217 Poly-BIZ is an effective alternative to lead-based shielding products. It is comprised of a solid suspension of high density bismuth powder in a polyethylene matrix. Poly-BIZ is a non-hazardous gamma shield with an additional benefit as a neutron moderator.

Poly-BIZ is typically provided as slabs or bricks, but is readily machined into custom shapes.



High hydrogen content



Gamma shielding alternative to lead



Available in slabs, cylinders, and other custom shapes

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SWX-217

Poly-BIZ

Specifications

Composition Data

Hydrogen atom density / cm ³ :	5.5 x 10 ²³
Bismuth atom density / cm ³ :	6.8 x 10 ²²
Total Density:	3.0 g / cm ³ (187 lbs./ft ³)

Radiation Properties

Gamma resistance:	5 x 10 ⁸ rad
Neutron resistance:	2.5 x 10 ¹⁷ n/ cm ²

Physical Properties

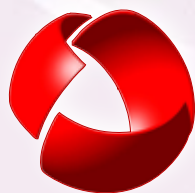
State:	Bricks, slabs, cylinders
Color:	Brown
Odor:	No odor
Machinability:	Excellent

Thermal Properties

Recommended Temperature Limit:	180 °F (82.2 °C)
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Chemical Properties

Chemical Name & Synonyms:	Bismuth-loaded Polyethylene
Trade Name & Synonyms:	SWX-217, Poly-BIZ
Chemical Family:	Solid suspension of bismuth & polyethylene
Formula:	Mixture (CH ²) _n , Bi
Solubility in Water:	Negligible



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