

## SWX-261 Neutron Putty



SWX-261 Neutron Putty can be used for the collimation of neutrons and for neutron streaming. It is a non-hardening, boron loaded putty that contains 10% boron combined with a high hydrogen content.

Neutron Putty can be kneaded by hand to obtain the desired consistency and workability. It can be softened by warming it up slightly for added workability. Disposable gloves are recommended when handling as the putty is quite sticky.



**Neutron Putty contains 10% boron and high hydrogen content.**



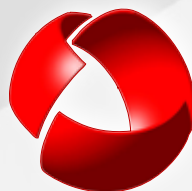
**A 1-inch thick layer has a thermal neutron attenuation factor of approximately 105**



**Since Neutron Putty is non-hardening, it will not dry out to form a powder**



**Provided in 8-lb (3.6 kg) cans**



# SWX-261

## Neutron Putty

# Specifications

### Composition Data

Hydrogen atom density/ cm <sup>3</sup> :	5.9 x 10 <sup>22</sup>
Natural isotope distribution:	99.98% <sup>1</sup> H
Boron atom density/ cm <sup>3</sup> :	6.1 x 10 <sup>21</sup>
Natural isotope distribution:	19.6% <sup>10</sup> B and 80.4% <sup>11</sup> B
Weight percent of all isotopes of boron:	10%
Total Density	1.1 g / cm <sup>3</sup> (69 lbs/ ft <sup>3</sup> )

### Radiation Properties

Macroscopic thermal neutron cross section:	4.7 cm <sup>-1</sup>
Gamma resistance:	5 x 10 <sup>8</sup> rad
Neutron resistance:	2.5 x 10 <sup>17</sup> n / cm <sup>2</sup>

### Physical Properties

State	Putty
Color	White
Odor	No significant odor
Machinability:	Poor

### Thermal Properties

Recommended Temperature Limit:	110 °F (45 °C)
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### Chemical Properties

Chemical Name & Synonyms:	Borated poly putty
Trade Name & Synonyms:	SWX-261 Neutron Putty



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