

T-Flex® Pipe Shielding



- Small bore to large diameter pipes
- Flexible while maintaining shape
- Tight fitting to pipe geometry
- Designed around weight limits
- Custom fit around elbows, tees, valves, and other interferences



Technical Specifications

T-Flex® is the most versatile shielding material that NPO has to offer. Its ability to be poured as a liquid and cured as a flexible solid makes it ideal for fitting the maximum amount of shielding around a component, while keeping space and weight to a minimum.

The most common way this is implemented is through pipe and valve shielding. NPO is able to manufacture the shielding to fit snug around the pipe and/or valve. This allows the maximum amount of shielding as close to the source as possible, while steering clear of any interferences in the immediate area.

Below are the technical specifications which apply to all T-Flex® products.

SPECIFICATIONS	
MATERIAL:	METAL IMPREGNATED POLYMER (TUNGSTEN, BISMUTH, IRON, BORON, BISMUTH/BORON BLEND)
SAFETY:	REFER TO SDS (SEPARATE DOCUMENT)
SITE PREPARATION:	ENSURE SURFACE IS FREE OF PROTRUSION OR SHARP AREAS. CONSIDER ALL INSTALLATION CONDITIONS
USAGE:	SECURE TO SURFACE VIA MAGNETS, STRAPS, OR OTHER SPECIFIED DEVICES
GENERAL CONDITION:	FLEXIBLE WITH NO SIGNS OF CRACKING OR BRITTLINESS, DARK GREY IN COLOR (OPTIONAL: COLORED OUTER LAYER)
HANDLING:	USING PRIOR TRAINING OR A MOCK UP DEMONSTRATION IS RECOMMENDED BEFORE INSTALLATION
PHYSICAL PROPERTIES:	<ul style="list-style-type: none"> TENSILE: 320 psi (22 Bar) ELONGATION: 158% TEAR: 34.5 lbf/in (390 N/cm) DUROMETER: 46
MATERIAL DENSITY:	<ul style="list-style-type: none"> T-FLEX TUNGSTEN: 0.25 lb/in³ (6.9 g/cm³) T-FLEX BISMUTH: 0.16 lb/in³ (4.3 g/cm³) T-FLEX BORON: 0.045 lb/in³ (1.245 g/cm³) T-FLEX NEUTRON (BORON/BISMUTH BLEND): 0.093 lb/in³ (2.57 g/cm³)
THERMAL PROPERTIES:	<ul style="list-style-type: none"> CONTINUOUS Operating Temperature (REGULAR): 350°F (177°C) CONTINUOUS Operating Temperature (HIGH TEMP): 400°F (204°C) Maximum Temperature: 450°F (232°) ASTM E-84: CLASS A NFPA 701-2010: PASS
RAD STABILITY:	<ul style="list-style-type: none"> incipient to mild damage (25% damage) up to over 10E8 rads (1000 kGy) (PER NASA SP-8053)
BORIC ACID SUBMERSION:	<ul style="list-style-type: none"> AFTER 96 HOURS: NO NOTICEABLE DEGREDDATION OF THE T-FLEX ICP-OES ANALYSIS DID SHOW MEASURABLE AMOUNTS OF LEACHED TUNGSTEN IN BORIC ACID SOLUTION
LEACHABLES TEST:	<ul style="list-style-type: none"> ASTM D4327-03: ACCEPTABLE ASTM D1976-07: ACCEPTABLE