



Ultonium II Glass Lined Pipe Specification

Ultonium II ceramic glass lining is applied to clean steel sand blasted to a white finish, to create a continuous, smooth surface designed to specifically prevent the build-up of any material if contacted with bare carbon steel. Ultonium II is a silica based premiere glass lining with other elements to give it strength and ware-ability

Niles Ultonium II is tested under the following ASTM testing guidelines:

W-H-196 Test = 7.0 – 8.0 mg/in²

This test consists of exposing the enamel to a boiling (212°F) 4/10% solution of sodium Bicarbonate for (8) eight, (18) eighteen-hour cycles. Maximum weight loss after eight cycles is not to exceed 15 mg/in².

PEI T-21 Spot Acid Test = Class A

This test is used to determine enamel resistance to acids. The test area is examined for visible effects on the enamel and is graded from Class AA (no sign of etching) to Class D (etched surface).

Impact resistance = Class 4 to 5

The impact resistance test is used to determine the adhesive qualities of enamel to the substrate. The enamel is graded from Class 1 (worst) to Class 5 (best), fractured glass adhering solidly to the impact area. Class 3 is acceptable.

Hi-Pot Test = Less than 20

The HYPO test is a measurement of the continuity of the enamel coating (Spark Test). Fifty (50) sparks or fewer are the acceptable count for the water storage industry.

Thickness:	10 mils +/- 2 mils
Adhesion:	Class 4 to 5
Resistance:	Class A
Tank Sizes:	2" diameter to 24" diameter, up to 120" length
Maximum Temperature:	180°F
Color:	Cobalt Blue