

Qtech-401 Hydropower Industry Ultra Anti Erosion & Abrasion Polyurea Coating

PRODUCTION INFORMATION

Production Description:

Qtech-401 Hydropower Industry Ultra Anti Erosion & Abrasion Polyurea Coating is the state of the art 100% solids, ultra fast cure, flexible, spray-applied, high build, and two components aromatic pure polyurea elastomer. The system consists of A component, a quasi-prepolymer rich of free NCO, and B component, a mixture of polyetheramines, amine extenders and other additives. Qtech-401 is used by itself or in combination with other materials to produce ultra tensile strength, hardness and elongation coatings, liners, wearing courses, and resilient surface for hydropower infrastructure and other constructions. Qtech-401 can be applied in all positions and to any suitably prepared substrate. Qtech-401 is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions. It is the optimum choice where a tough, flexible, impact resistant, anti-cavitation, anti-corrosion, anti-erosion surfacing system which exhibits extraordinary performance characteristics.

Advantages:

- 1. Fast cure, short down time, no sagging
- 2. Excellent Physiochemical Properties
- 3. Bondable and paintable to various kinds of substrates
- 4. Ambient insensitive, good thermal stability
- 5. 100% Solids, No VOC's, Odorless, No Toxic Vapors
- 6. Good resistance to a wide range of chemical attack
- 7. Anti-erosion, anti-cavitation, Impermeable, Abrasion resistant
- 8. Good weather ability, Added color stability
- 9. Wide service temperature (-45~150 °C)
- 10. Seamless, flexible, slick and non-porous

Recommended Uses:

Qtech-401 Hydropower Industry Ultra Anti Erosion & Abrasion Polyurea Coating is an ultra fast cure system; it can be applied at thicknesses of several ten millimeters, or greater, in a single application. It can be widely used in Water storage dam, Buttress dam, Overflow dam, Flood-discharge tunnel, Sluice pier, Desilting tunnel, Water diversion canal, Irrigation aqueduct; it can also be applied in Flood embankment, Flood discharge facility coordination etc.









Physical Properties:

Tensile Strength/ MPa	25
Elongation/%	400
Tear Strength/ (N/mm)	70
Shore Hardness	≥A90
Abrasion Resistance /(GB/T 1689-1998, cm ³ /1.61km, mg)	≤0.25
Friction Coefficient	$0.85 \sim 0.96$
Adhesion/ (Pull off, MPa)	≥3.5
Density/(g/cm ³)	$0.95 \sim 1.05$

Product Characteristics:

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Solids/%	100
VOC (calculated)	0
Gel Time/s	8
Tack Free/s	20~30
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Shelf Life 6 months, unopened at 15~40 °C

Flash Point/ °C >150
Mix Ratio V/V 1: 1
Recommended Spreading Thickness/mm 2~3
Colors Optional

Drying time is temperature, humidity, and film thickness dependent.

Chemical Resistance:

Consult our technicist and chemical test date for corrosive environment applications.

Installation:

Consult our application information and recommended method statements.

Packaging:

Part A: 220kilogram per drums.

Part B: 200 kilogram per drums. (Custom package available at additional charge)

Notes:

- 1. Qtech product is intended for industrial use by properly trained professional applicators only.
- 2. Thoroughly mix container of B component with an air-driven power mixer for a minimum of 15 minutes prior to application.

Oingdao Shamu International Trade Co., Ltd.

Tel: +86-532-55662106 Fax: +86-532-55662107 Email: info@shamu-intl.com Website: http://www.shamu-intl.com



- 3. Adding a nitrogen blanket is strongly recommended for use on the "A" component for storage after opening.
- 4. It is a 100% solids production, strictly prohibit add any diluents.
- 5. The quality and fitness of the product is depending upon the proper mixture and application of the component by the applicator.
- 6. This specification is an accumulation of long term testing and experience. Published technical data and instructions are subject to change without notice.
- 7. For more information please contact us or visit our website www.shamu-intl.com and www.polyurea.cn.