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## **Qttech-412 Coastal Dam Polyurea Protective Material**

### **PRODUCTION INFORMATION**

#### ***Production Description :***

**Qttech-412 Coastal Dam Polyurea Protective Material** is independently developed by Qingdao Shamu International Trade Co., Ltd. It 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. **Qttech-412** is used by itself or in combination with other materials to produce dam protective coatings, anti collision liners, reinforcing layer, and resilient surface on concrete, stone and other substrates. **Qttech-412** can produce an extremely tough film at all thicknesses; it may be applied in all positions and to any suitably prepared substrate. **Qttech-412** can effectively decrease the impact of tidewater to dam, improve the imperviousness, prevent floods and debris flow damage and improve the safety and durability of dams.

#### ***Advantages :***

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

#### ***Recommended Uses:***

**Qttech-412 Coastal Dam Polyurea Protective Material** 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 Coastal dam, Buttress dam, Overflow dam, Flood-discharge tunnel, Desilting tunnel, Water diversion canal, Flood embankment and Flood discharge facility coordination.



### **Physical Properties:**

Tensile Strength/ MPa	25
Elongation/%	415
Tear Strength/( N/mm)	80
Shore Hardness	A-88
Abrasion Resistance /(GB/T 1689-1998, cm <sup>3</sup> /1.61km, mg)	0.45
Friction Coefficient	0.85~0.96
Adhesion /(Pull off, MPa)	≥3.5
Density/( g/cm <sup>3</sup> )	0.95~1.05

### **Product Characteristics:**

Solids/%	100
VOC (calculated)	0
Gel Time/s	14
Tack Free/s	20~30
Shelf Life	6 months, unopened at 15~40 °C
Flash Point/ °C	>100
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 technician and chemical test data 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)



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**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.
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](http://www.shamu-intl.com) and [www.polyurea.cn](http://www.polyurea.cn).