



# **Qtech-400 High Speed Railway Sub Grade Polyurea Protective Coating**

## **PRODUCTION INFORMATION**

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

**Qtech-400 High Speed Railway Sub Grade Polyurea Protective 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-400** is used by itself or in combination with other materials to produce protective coatings, liners, wearing courses, and resilient surface on high speed railway sub grade and other substrates. **Qtech-400** can produce an extremely tough film at all thicknesses; it may be applied in all positions and to any suitably prepared substrate. **Qtech-400** 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, abrasion resistant, anti-corrosion, waterproof 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-corrosion, Skidding resistance, Impermeable, Abrasion resistant
8. Good weather ability, Added color stability
9. Seamless, flexible, slick and non-porous
10. No chalking and fading in long-term use outdoors

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

**Qtech-400 High Speed Railway Sub Grade Polyurea Protective 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 High Speed Railway Sub grade; it can also be applied in: Sea-Crossing Bridge, Sub-Sea Tunnel, Urban Metro, High-Grade Building, Marine Drilling Platform, Marine Steel Structure, Stadium stand, Industrial Facilities and so on.



### ***Physical Properties:***

Tensile Strength/ MPa	16
Elongation/%	400
Tear Strength/(N/m)	60
Shore Hardness	≥A90
Abrasion Resistance /(GB/T 1689-1998, cm <sup>3</sup> /1.61km, mg)	≤0.5
Impact Strength/ (Kg.cm)	50
Water Absorption/%	≤5
Friction Coefficient	0.85~0.96
Adhesion/ (Pull off, MPa)	≥2.5
Density/ (g/cm <sup>3</sup> )	0.95~1.05

### ***Product Characteristics:***

Solids/%	100
VOC (calculated)	0
Gel Time/s	10
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 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)

**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).