



# **Qttech-402 Power Industry Heat Resistant & Heavy Duty Polyurea Material**

## **PRODUCTION INFORMATION**

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

**Qttech-402 Power Industry Heat Resistant & Heavy Duty Polyurea Material** 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-402** is used by itself or in combination with other materials to produce protective coatings, heat resistant layer, and thermal-protective liners on concrete and other substrates. **Qttech-402** can produce an extremely tough film at all thicknesses; it may be applied in all positions and to any suitably prepared substrate. **Qttech-402** has excellent heat resistant and heavy duty property, its physical properties conforms to desulfuration and denitration design of power industry. It is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

### ***Advantages :***

1. Fast cure, short down time, no sagging
2. Excellent Physiochemical Properties
3. Bondable and paintable to various kinds of substrates
4. Excellent thermal stability, Ambient insensitive
5. 100% Solids, No VOC's, Odorless, No Toxic Vapors
6. Good resistance to a wide range of chemical attack
7. Good heat resistant, heavy duty and Durability
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:***

**Qttech-402 Power Industry Heat Resistant & Heavy Duty Polyurea 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 power industry and smelting industry Desulfurization Tower, Denitrification Tower, Charring Tower, Evaporation Tanks, Neutralization Tanks; it can also be applied in: Oil & Gas Transmission, pipeline antiseptic treatment , Industrial Facilities ,and so on.



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

|                               |           |
|-------------------------------|-----------|
| Tensile Strength/ MPa         | ≥26       |
| Elongation/%                  | ≥400      |
| Tear Strength/( N/mm)         | 60        |
| Shore Hardness                | ≥A90      |
| Friction Coefficient          | 0.85~0.96 |
| Adhesion /(Pull off, MPa)     | ≥3.0      |
| Density/( g/cm <sup>3</sup> ) | 0.95~1.05 |
| Chemical Attack Resistance    | Excellent |
| High Temperature Stability    | Excellent |

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

|                                    |                                |
|------------------------------------|--------------------------------|
| Solids/%                           | 100                            |
| VOC (calculated)                   | 0                              |
| Gel Time/s                         | 12                             |
| Tack Free/s                        | 20~30                          |
| Shelf Life                         | 6 months, unopened at 15~40 °C |
| Flash Point/ °C                    | >200                           |
| 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)

### ***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).