Qtech-404
MINING EQUIPMENT ULTRA ANTI-ABRASION POLYUREA MATERIAL

Production Description

Qtech-404 Mining Equipment Ultra Anti-Abrasion 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. Qtech-404 is used by itself or in combination with other materials to produce coatings, liners, wearing courses, and resilient surface on mining equipment surface and other substrates. Qtech-404 can produce an extremely tough film at all thicknesses; it may be applied in all positions and to any suitably prepared substrate. Qtech-404 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 coating surfacing system which exhibits extraordinary performance characteristics.

Advantages

● Fast cure, short down time, no sagging
● Bondable and paintable to various kinds of substrates
● 100% Solids, No VOC’s, Odorless, No Toxic Vapors
● Excellent abrasion resistance and impact resistance
● Seamless, flexible, slick and non-porous

● Excellent physiochemical properties
● Ambient insensitive, good thermal stability
● Good resistance to a wide range of chemical attack
● Good weather ability, added color stability
● No chalking or fading in long-term use outdoors

LEADING TECHNOLOGY, PROVEN QUALITY
Recommended Uses

Qtech-404 Mining Equipment Ultra Anti-Abrasion Polyurea Material is an ultra fast cure system; it can be applied at thicknesses of several millimeters, or greater, in a single application. It can be widely used in mineral equipment, mineral processing, vibration screen, ore washing roll, flotation cell, ore bucket; it can also be applied in: spiral separator, pipe coatings, grinding plants, marine steel structure, truck bed liners and so on.

Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength/ MPa</td>
<td>25</td>
</tr>
<tr>
<td>Tear Strength/ N/mm</td>
<td>70</td>
</tr>
<tr>
<td>Abrasion Resistance (GB/T 1699-1998 cm²/1.61km)</td>
<td>≤0.24</td>
</tr>
<tr>
<td>Shore Hardness</td>
<td>≥ A88</td>
</tr>
<tr>
<td>Impact Strength/Kg·cm</td>
<td>70</td>
</tr>
<tr>
<td>Friction Coefficient</td>
<td>0.75 ~ 0.85</td>
</tr>
<tr>
<td>Adhesion (Steel, Pull off, MPa)</td>
<td>10</td>
</tr>
<tr>
<td>Density/(g/cm³)</td>
<td>0.95 ~ 1.05</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>No Corrosion, No Blister, No Spalling</td>
</tr>
</tbody>
</table>

Product Characteristic

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids/ %</td>
<td>100</td>
</tr>
<tr>
<td>VOC (calculated)</td>
<td>0</td>
</tr>
<tr>
<td>Gel Time/s</td>
<td>12</td>
</tr>
<tr>
<td>Tack Free/s</td>
<td>20 ~ 30</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>6 months, unopened at 15°C ~ 40°C</td>
</tr>
<tr>
<td>Flash Point/ °C</td>
<td>150</td>
</tr>
<tr>
<td>Mix Ratio V/V</td>
<td>1:1</td>
</tr>
<tr>
<td>Recommended Thickness/mm</td>
<td>2 ~ 3</td>
</tr>
<tr>
<td>Colors</td>
<td>Optional</td>
</tr>
</tbody>
</table>

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

Notes

- Qtech product is intended for industrial use by properly trained professional applicators only.
- Thoroughly mix container of B component with an air-driven power mixer for a minimum of 15 minutes prior to application.
- Adding a nitrogen blanket is strongly recommended for use on the A component for storage after opening.
- It is a 100% solids production, strictly prohibit add any diluents.
- The quality and fitness of the product is depending upon the proper mixture and application of the component by the applicator.
- This specification is an accumulation of long term testing and experience. Published technical data and instructions are subject to change without notice.

Innovation is our daily work. The latest specification could be updated and downloaded at www.shamu-intl.com.