Qtech-407
ANTI–MICROBIAL POLYUREA MATERIAL

Production Description
Qtech-407 Anti–Microbial Polyurea Material is the state of the art 100% solids, ultra fast cure, flexible, spray–applied, high build, and two components aromatic 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-407 has been chemically engineered to inhibit the growth of a broad range of microorganisms such as gram–negative and gram–positive bacteria, fungi and select viruses, so it will not wash or wear off or lose its biostatic properties after installation. Qtech-407 can produce an extremely tough film at all thicknesses; it may be applied in all positions and to any suitably prepared substrate. Qtech-407 is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions. It is the optimum choice where a tough, flexible, anti–microbial surfacing system which exhibits extraordinary performance.

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
- High impact and abuse resistant–replaces fiberglass and FRP
- Seamless, flexible, slick and non–porous
- Excellent anti–microbial and mildew proof properties
- Ambient insensitive, good thermal stability
- Good resistance to a wide range of chemical attack
- Good weather ability, added color stability, no chalking
- Bridge moving cracks to 1/16”

LEADING TECHNOLOGY, PROVEN QUALITY
**Recommended Uses**

**Qtech-407 Anti-Microbial 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:

- Clean Room Walls Ceilings and Floors
- Food and Beverage Processing Areas
- Pharmaceutical Facilities
- Hospital and Research Facilities
- Lavatories
- Correctional Facilities

![Image of applications](image)

**Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength (MPa)</td>
<td>17.5</td>
</tr>
<tr>
<td>Tear Strength (N/mm)</td>
<td>55</td>
</tr>
<tr>
<td>Abrasion Resistance (ISO 2435)</td>
<td>&lt;=0.35</td>
</tr>
<tr>
<td>Shore Hardness</td>
<td>A80</td>
</tr>
<tr>
<td>Impact Strength (Kg cm²)</td>
<td>20</td>
</tr>
<tr>
<td>Anti-Microbial Rate (%)</td>
<td>99.9</td>
</tr>
<tr>
<td>Adhesion (Pull off, MPa)</td>
<td>&gt;=2.5</td>
</tr>
<tr>
<td>Density (g/cm³)</td>
<td>0.96 – 1.05</td>
</tr>
</tbody>
</table>

**Product Characteristic**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids/%</td>
<td>100</td>
</tr>
<tr>
<td>Gel Time/s</td>
<td>11</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>6 months, unopened at 15°C–40°C</td>
</tr>
<tr>
<td>Mix Ratio V/V</td>
<td>1: 1</td>
</tr>
<tr>
<td>Colors</td>
<td>Optional</td>
</tr>
</tbody>
</table>

**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.

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