



Qtech-413 Urban Metro Vibration & Noise Reduction Damping Material

PRODUCTION INFORMATION

Production Description :

Qtech-413 Urban Metro Vibration & Noise Reduction Damping Material is independently developed by Qingdao Shamu International Trade Co., Ltd. The viscoelastic material system consists of A component, a quasi-prepolymer rich of free NCO, and B component, a mixture of polyetheramines, hydroxyl-terminated polyether, amine extenders and other additives. **Qtech-413** can convert mechanical energy into heat energy by the coactions of resin and energy dissipation filler. It is used by itself or in combination with other materials to produce damping protective coatings, anti collision liners, reinforcing layer, and resilient surface on urban metro, tunnel concrete. **Qtech-413** can produce an extremely tough film at all thicknesses; it may be applied in all positions and to any suitably prepared substrate. **Qtech-413** can effectively decrease the vibration, noise and impact of high speed train; it can improve the safety and durability of urban metro.

Advantages :

1. Excellent vibration & noise reduction, impact resistant.
2. Bondable and paintable to various kinds of substrates
3. Fast cure, short down time, no sagging
4. Excellent Waterproofing and Impervious
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

Recommended Uses:

Qtech-413 Urban Metro Vibration & Noise Reduction Damping Material is a 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 urban metro vibration and noise reduction; it can also be applied in vehicle, shipping, machinery and high speed railway noise insulation zone and so on.



Physical Properties:

Damping loss factor	≥ 0.05
Complex loss factor	0.15~0.25
Tensile Strength/ MPa	≥ 8
Elongation/%	≥ 400
Adhesion/%	100
Toxicity	Non toxic
Impact strength/(N/m)	4.0
Sea water immersion(6 months)	No Blister, No Corrosion, No Spalling
Salt frog(>1000hrs)	No Blister, No Corrosion, No Spalling
Diesel Fuel(8 months)	No Blister, No Corrosion, No Spalling

Product Characteristics:

Gel Time/min	< 2
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)



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 and www.polyurea.cn.