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# Aqua 90A

## DESCRIPTION

**System Aqua 90A** is a two component water-based aliphatic polyurethane elastomer. It is ideally suited as a topcoat for aromatic polyurethane and polyurea elastomers, where exceptional weather resistance and colorfastness is required.

**System Aqua 90A** is available as a white tint base or a clear coat in both gloss and matte finish. Can be custom tinted with universal colorants.

## PROPERTIES

(of cured product\*)

|                      |                                     |
|----------------------|-------------------------------------|
| Density              | 1.12 g/mL                           |
| Service Temperature  | -50°C to 200°C.                     |
| Shore Hardness       | 80A to 90A approx.                  |
| Elongation           | approx. 300%                        |
| Tensile Strength     | 4000 psi                            |
| Crosslinker Addition | 4-8% by volume<br>160-320 grams/USG |

## AVAILABILITY

**System Aqua 90A** is packaged in 5 US Gallon pails and 1 US Gallon cans. Crosslinker is packaged in 500 mL or 1 Gallon cans.

## STORAGE

Store in a cool and dry place for product integrity. Store in tightly sealed containers to protect from moisture and foreign materials.

## PRODUCT SAFETY

For details an MSDS is available from Quantum Coatings.

\*Approximate values only. Should not be considered specifications. This data sheet is intended for general information only. Updated March 20, 2005

## INSTRUCTIONS

Add crosslinker directly to **Aqua 90A** and mix well. A 30 minute induction time is required before use. Mix well at ten minute intervals during induction time. 4% crosslinker will provide good durability. For improved durability or where water immersion is likely use 8% crosslinker.

**Aqua 90A** will thicken after induction. Use clean water to reduce application viscosity. Do not exceed 10% water. Crosslinked **Aqua 90A** should be used within eight hours.

Check compatibility of universal colorants before use.

## FEATURES

- Outstanding weatherability, 30 minute cure time, long pot life.
- Excellent abrasion resistance even at high temperatures.
- Highly resistant to impact over wide temperature range.
- Resistant to cracking under high flex conditions.
- Remains flexible at low temperature.
- Resistant to water and a wide range of chemicals.
- Can be tinted to a wide range of colors.

## OTHER

The purchaser of this product must rely on his own judgement in determining suitability for his purpose, and in applying directions as to handling and use. Quantum makes no warranty, expressed or implied, except that if this product proves on inspection to be defective, Quantum will replace it or refund the purchase price. Labour costs and other consequential damages are hereby excluded. No representative or purported agent of Quantum has the authority to change this warranty.



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## DETAILED INSTRUCTIONS

### General:

**System Aqua 90A** is a two component water-based aliphatic polyurethane elastomer. **Aqua 90A** can be used as a single component product; however, adding crosslinker to the base prior to application will enhance durability and chemical resistance. Adding crosslinker at a rate of 4-8% by volume will provide durability similar to plural component fast set elastomers.

**Aqua 90A** is used primarily as a topcoat for aromatic polyurethane and polyurea systems where UV resistance and colour stability is required.

### Substrate Preparation:

**Aqua 90A** should be applied to fast set systems immediately after they are sprayed for optimum adhesion. A primer and/or sanding may be required if the previous coat has cured for more than 12 hours. A spot test for adhesion is recommended in all cases to ensure best results. Do not apply **Aqua 90A** to wet or tacky surface.

### Mixing:

Add crosslinker at desired level to **Aqua 90A** and mix well. Allow a 30 minute induction time and mix at ten minute intervals. Following induction time the mixture should have a smooth uniform consistency. Adding crosslinker will reduce the pot life of **Aqua 90A** to a few hours. At elevated temperatures and high crosslinker levels the pot life can be reduced to less than 1 hour. Do not leave mixed material in spray lines.

### Application:

Apply using spray, brush or roller. Airless spray is the preferred method. To reduce viscosity use only clean water and do not exceed 10% by volume. Apply multiple thin passes for best results. Do not exceed 10 mils wet in a single pass. If applied too heavily, surface imperfections can occur during drying. Apply only enough **Aqua 90A** to achieve good hiding of base coat. If a higher film build is desired allow first pass to become touch dry before applying additional coats.

### Clean-up:

Clean all tools and equipment with water. If product has begun to set a more powerful cleaner (NMP, Allsolve, etc.) may be required.

### Return to Service:

Allow a minimum of 24 hours cure before putting into service.