

QUIK-SHIELD 901

Aromatic Polyurea Spray Elastomer

QUIK-SHIELD® 901 is a 100% solids, aromatic, polyurea elastomer coating. It is formulated for spray application as a high performance coating in commercial and industrial applications.

HIGH PERFORMANCE:

- Abrasion and Wear Resistance
- High Elasticity
- High Tensile Strength

EXCEPTIONAL CONTRACTOR VALUE:

- Quick Cure Times
- Increased Service Life
- Lower Lifetime Cost

HIGH THERMAL STABILITY:

Withstands temperatures from -30°F to 230°F (in cured state)

PACKAGING:

275 Gallon Tote
55 Gallon Drum

TYPICAL PHYSICAL PROPERTIES*:

Tensile Strength (psi @ 77°F)	
Elongation (% @ 77°F)	
Modulus (ksi)	
Hardness	
Hardness	
Tear Die C (pli)	
Tear Trouser (pli)	
Abrasion Resistance (mg: H-18)	
Water Vapor (perms @ 40 dry mils)	
Water Vapor (perms @ 60 dry mils)	
Water Vapor (perms @ 90 dry mils)	
Hydrostatic Pressure (feet of water)	
Primed Concrete Adhesion (psi)	
Primed Steel Adhesion (psi)	

PROCEDURE

D-412	2500±200
D-412	300±100
D-412	15-20
Shore A	95
Shore D	40-45
D-624	400±50
D-1938	240±50
D-4060	250-300
E-96	1.04
E-96	0.81
E-96	0.54
D-5385	210
D-4541	>500
D-4541	>1000

VALUES

REACTIVITY PROFILE at 77°F (25°C):

Gel Time (seconds)	5-10
Tack Free Time (seconds)	15-20
Cure Time (hours)	24

APPROXIMATE COVERAGE:

Mils/100 sqft/gallon	16 mils
60 mils/100 sqft	3.75 gallons

HANDLING PROPERTIES at 77°F (25°C):

	A SIDE (ISO)	B SIDE (RESIN)
Viscosity, cps	450	1100±200
Specific Gravity	1.10	1.02

RECOMMENDED PROCESSING INFORMATION (ADDITIONAL DETAILS ON BACK):

Dispensing Ratio	1:1
Drum Heaters	70-80° F (21-27° C)
Hose Heaters	140-170° F (60-77° C)
Primary Heaters (A&B)	140-170° F (60-77° C)
Dynamic Pressure (A&B)	1800 psi minimum
Static Pressure (A&B)	2000-3000 psi
Ambient Temperature**	40-130° F (4-54° C)

**Temperatures outside this range are possible, contact SWD for more information

MIXING (ADDITIONAL DETAILS ON BACK):

- Mix B-side (resin) for 30 minutes before application.
- Mix B-side (resin) during application.
- Mixing of A-side (iso) is not required.

RECOMMENDED STORAGE AND SHELF LIFE (ADDITIONAL DETAILS ON BACK):

- Storage temperatures 50-100°F (10-38° C). See back for preconditioning of material.
- Shelf life from date of manufacture (unopened containers):
 - A-Side (iso): 12 months
 - B-Side (resin): 6 months
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

*Properties achieved in a lab environment at 77°F. Field conditions may cause variation in properties.



SWD Urethane

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PREPARATION OF SUBSTRATES

Providing the proper substrate is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. The following are manufacturer's recommendations. However, other preparation techniques may be required given unique/specialized application circumstances. Contact SWD for technical questions.

It is recommended to remove dust, dirt, oil, latents, paint, and alternative polymers from all surfaces prior to applying SWD products.

See NRCA and SPFA guidelines for further details on substrate preparation.

SPRAY FOAM

- Coating should be applied 2-24 hours after installation of foam. Beyond 24 hours, contact SWD for recommendations.
- Avoid contaminating surface of foam after foam installation.
- Blow off surface of foam, as necessary, before application of coating.

STEEL & OTHER METALS

- Metal surfaces should be free of all rust, scale, dirt, grease, oil, chalking, paint or other contaminants.
- It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Blasting and priming is not always required. Contact SWD for recommendations.
- If priming, use Quik-Shield 990. Refer to Quik-Shield 990 TDS for more details.

CONCRETE

- The concrete surface should be fully cured, structurally sound, clean, and dry.
- Fill large voids with appropriate backer rods or appropriate fillers.
- Blasting and priming is not always required. It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.
- If priming, use Quik-Shield 990. Refer to Quik-Shield 990 TDS for more details.

PREVIOUSLY APPLIED FOAM or OTHER POLYMERS

- As practical, remove previously applied foam and other polymer products. Application of product over existing materials should be performed only after adhesion/compatibility is verified.

OTHER SUBSTRATES

- It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.

PROCESSING

1. It is recommended to precondition material to 70-80°F prior to application. Material may thicken at lower temperatures which can cavitate pumps.
2. We recommend using an electric driven drum mixer (Krause & Becker 69856 Dual Speed Mixer or equivalent) in the center bung of drum and ensure that the mixer is securely attached. Recommended configuration – 400RPM-800RPM, 120V, 10A.

Pneumatic configuration – 400RPM-800RPM, 100psi inlet, 12cfm.

3. Recommended folding blade arrangement: 6" blade top, 6" blade middle, 8" blade bottom.
4. Mix B-Side (Resin) for 30 minutes prior to application.
5. Continually mix B-Side (Resin) while applying material.
6. Mixing of A-Side (Iso) is not required.
7. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1800psi dynamic pressure and a maximum pressure differential of 200-psi between resin and isocyanate.
8. Static pressure is typically set at 2000-3000psi. Dynamic pressure should operate at a minimum of 1800psi.
9. Primary heaters and hose heaters are typically set between 140-170°F. Drum heaters set at 70-80° F are recommended for temperatures lower than 60° F. Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.
10. Proper application temperature setting is the responsibility of the end user. Equipment temperature varies and can be dependent on equipment, hose length, elevation, ambient temperature, substrate temperature humidity, and other factors. Contact an SWD representative for further recommendations.

APPLICATION

1. Clean surfaces according to "Preparation of Substrates" section.
2. If priming, follow manufacturer recommendations. Ensure primer is adequately cured prior to application.
3. Ambient/substrate temperatures should be between 32-130°F. Higher and lower application temperatures are possible, contact SWD representative for more details.
4. Flush an adequate amount of material through the lines/gun prior to spraying desired surface when changing between systems. Flush amount will be dependent on prior system used. Contact an SWD representative for more details.
5. Before application, test material to ensure that material sprays, cures, and hardens properly.
6. Inspect applied material intermittently to ensure no problems exist. If problems are detected, discontinue application and inspect all substrates, equipment, gun, and liquid material for problem source(s).
7. Never allow liquid components to run out.
8. Recoat window is less than 12 hours after installation of initial coat. Beyond 12 hours, contact SWD for recommendations.
9. Recoat preparation techniques may include abrasion, and/or solvent wiping.

CLEANING AND MAINTENANCE

1. Spray equipment must be maintained in proper operating condition. Failure to adequately maintain spray equipment may result in poor product performance. Refer to your equipment manufacturer's maintenance procedures for more details.
2. Contact SWD for long-term equipment storage recommendations.

The information herein is believed to be reliable; however, unknown risks may be present. SWD Urethane makes no warranty, expressed or implied, concerning this product's merchantability or fitness for any particular use. The product will meet the written liquid component specifications as indicated on the technical data sheet published at the time of the purchase. The entirety of SWD Urethane's responsibility is limited only to the cost of the SWD material. The foregoing constitutes SWD Urethane's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.

Safety is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. Become familiar with local, state, and federal regulations regarding chemical health, safety, and handling. For more information consult the product SDS, contact the SPFA (www.sprayfoam.org) or the ACC (www.spraypolyurethane.org).



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TDS-QS901 09-15 Rev 1