



FX-640

Sprayable Aromatic Polyurea

DESCRIPTION:

FX-640 Sprayable Aromatic Polyurea is a two component spray applied polyurea coating. It dries in seconds to provide a tough chemical and abrasion resistant surface. This reaction is very fast, proceeding to completion without any catalysts. Typically, working times ("gel times") are less than 30 seconds. This fast reaction, of course, requires a fast, efficient mixing technique so that the mixture can be applied within the short gel times. Impingement mixing from available two-component spray machinery is efficient and entirely adequate.

ADVANTAGES:

- Fast cure. Minimal downtime. May be walked on within 60 seconds.
- Excellent adhesion to a variety of substrates.
- 100% solids, no VOC, low odor
- Seamless and waterproof
- Resistant to many chemicals
- Flexible: will bridge cracks
- High thermal stability of temperatures up to 350°F.
- Unlimited DFT in a single application.
- Cures from -20°F to 225°F

PHYSICAL PROPERTIES:

Finish	Semi-Gloss
Color	Gray, Black, Tan

Custom colors available upon request
(It should be noted that aromatic polyureas such as FX-640 may undergo a color change over time.)

Volume Solids	100%
VOC	0
Mix Ratio	1A :1B by volume 1.08/1.00 by weight

Drying Properties @ 30 mils wet @ 73°F and 50% RH

Gel time, sec	30
Surface at 60 sec	Dry

Cured Properties

Shore D Hardness,	43
Tensile strength, psi	2200
Elongation, %	200
Tear strength, pli	360
Flexural modulus, psi	
@ 77°F	100
@ -20° F	56,200

Abrasion resistance, wt. loss,
1000 g., 1000 rev.,

CS-17 wheels	< 2 mg
H-18 wheels	45. mg
MVT, perms at 30 dry mils	0.061

Water absorption, % wt. gain (immersion for 24 hrs. @ 25°C)	1.5
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Adhesion, Elcometer	
Concrete, unprimed	300 psi
Concrete, primed	600 psi
Adhesion, steel	1000 psi

SURFACE PREPARATION:

Contact Fox Industries, Inc. Technical Representative for detailed surface preparation guideline requirements. Each individual application or installation is unique.

General surface preparations guidelines:

Steel:

Immersion Service: Minimum SSPC-SP10, Near-White blast cleaning.

Non-Immersion Service: Minimum SPC-SP10, Near-White blast cleaning

Concrete:

Allow new concrete to cure 28 days. Abrasive blast all concrete and refer to SSPC-SP13/NACE 6 Standard. Concrete must be clean, dry and sound with a sufficient profile.

Galvanized and other substrates (Geotextile applications):

Surface preparation will vary depending on exposure. Consult with a Fox Industries Technical Representative for specific guidelines or instructions.

APPLICATION:

Specialized plural component spray equipment is needed. Please consult with Fox Industries for proper equipment procedures and information.

Use only heated plural component equipment capable of producing 2000 to 3000 psi and 2 gallons per minute output consistency with approximate material heaters.

Maintain temperature at a range of 140°F to 160°F.

A 50% overlay on each spray pass of the gun is recommended to avoid holidays, pinholes and achieve consistent film thicknesses.

A cross hatch spray pattern is strongly encouraged.

(OVER)

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RECOMMENDED THICKNESS:

Normally used at film thicknesses of 50 mils (32 SF/gallon). However, thickness, if desired, can be up to 100 mils (15 SF/gallon). Recommendations will vary with substrates and service conditions.

PACKAGING:

FX-640 is packaged as a 10 gallon and 110 gallon units

SHELF LIFE:

Six (6) months minimum when stored at 75°F and dry conditions.

STORAGE:

FX-640 MUST BE STORED IN a dry, well protected and suitable storage environment **WITH TEMPERATURE BETWEEN 60 and 85°F**. Protect from freezing.

SAFETY:

Refer to MSDS sheet prior to use.

CAUTION:

Contains organic isocyanates MDI. Avoid breathing vapors. Avoid contact with skin and eyes. Do not ingest. Keep away from foodstuffs and wash thoroughly before smoking or eating. Should skin contact occur, wash skin well with soap and water. Should eye contact occur, flush thoroughly for at least 15 minutes with water. Get medical attention.



Member, Polyurea Development Association

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