



ShieldPoly

F-15 AR

Aromatic Polyurea Spray - High Abrasion Resistance

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Product Description

ShieldPoly F-15 AR (Abrasion Resistant) is a fast set, rapid curing, 100% solids, flexible, two-component high abrasion resistant polyurea elastomer spray coating material. This Polyurea is designed for applications requiring increased abrasion and wear resistant properties of the sprayed coating material, this Polyurea will typically outperform standard polyurea's used in industrial and mining environments. It's extremely fast gel time makes it suitable for applications in cold environments without special conditioning of the component resins and isocyanates.

F-15 AR is suitable for applications in industrial and mining including both dry and wet areas for coating tanks, CIL's, screens, concrete, steel and other areas. F-15 AR is inert, it will not hydrolyse, leach, or contaminate other materials, and is bondable and paintable. F-15 AR is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Features

- ✓ High abrasion resistance
- ✓ 100% solids, no VOC's
- ✓ 1:1 mix ratio by volume
- ✓ Rapid cure
- ✓ Fast return to service
- ✓ Applied by plural component spray
- ✓ Odorless
- ✓ Exposure range from -40°F to 300°F, dry

Limitations

Cannot be used in situations of extremely high or low pH, coupled with high temperature immersion. Contact ShieldCrete® International for a more suitable system.

Applications

- ✓ Industrial and processing
- ✓ Steel, Concrete protection
- ✓ Tank lining and processing equipment

Coverage Rates

Theoretical Coverage 1L = 1mm thick over 1m²

Mixing

Must be installed using a 1:1 ratio plural high-pressure, heated pump, fitted with high-pressure impingement mix spray gun. The proper necessary equipment can vary by the individual application. Contact The ShieldCrete® International for more support.

Technical/Performance Data

Mix Ratio by Volume	1:1
Gel Time (Seconds), ASTM D1640	12 - 20
Tack-Free Time (Seconds), ASTM D1640	45 - 60
VOC Content	0
Solids Content	100
Shore D Hardness, ASTM D2240	35 - 40
Shore A Hardness, ASTM D2240	80 - 90
Elongation % ASTM D638, Type IV	400 - 450
Tensile Strength (psi), ASTM D638, Type IV	1450 - 2000
Tear Strength (lb./in.), ASTM D624, Die C	450 - 570
Taber Abrasion (mg loss), ASTM D4060 (HS-22 Wheel, 1000 Cycles)	< 30
(H-18 Wheel, 1000 Cycles)	< 21

The values stated in this technical data sheet are produced under controlled laboratory conditions.

Preparation and Installation

Coating performance and adhesion are directly related to surface preparation. Many surface-coating failures can be attributed to improper surface preparation. Coatings are partially dependent on the integrity and structure strength of the substrate. A properly prepared substrate is free of contaminants, including but not limited to dust, dirt, oil, grease, rust, and corrosion. In certain applications, priming the substrate will be required prior to applying F-15 AR. For additional information, please review the material processing and handling guide or contact a member of ShieldCrete® International technical support team.

Colors

F-15 AR comes in 3 standard colors: Tan, Black, and Gray. If you need a special color for a specific application, please contact ShieldCrete® International for more information.

Packaging

400 Litre Kit

200 Litre Part-A (Isocyanate) and 200 Litre Part-B (Resin)

Products are packaged by weight, so final package volume is a close estimation.

Shelf Life

A properly stored product in original, unopened factory containers, kept at a temperature above freezing should have a shelf life of 12 months from the date of shipment. Proper storage temperature is 60°F to 110°F (16°C to 45°C).

Safety

For in-depth information on product safety and precautions, please review the product SDS sheets. Prior to using the product, ensure that you have the proper personal protection equipment (PPE) available.

This includes but is not limited to the following items:

- ✓ Safety Glasses with a splash shield
- ✓ Minimum Organic Cartridge Respirator
- ✓ Rubber or Nitrile Gloves
- ✓ Disposable or Reusable Long Sleeve Overalls
- ✓ Rubber or Leather Boots

Always be sure to follow the precautions listed below when using the material:

- ✓ Do not use near high heat or open flame.
- ✓ Do not take internally.
- ✓ Keep out of reach of children.

Maintenance

No Information Provided

Clean-Up / Disposal

Excess material can be mixed together at the proper ratio and disposed of without restriction once cured. Product containers may be disposed of according to local, state and federal laws.

Warranty

At its sole election, ShieldCrete® International will refund the price of or replace the product it finds to be defective provided the product has been used properly and installed by a certified ShieldCrete® International applicator. Except as expressly stated above, the company makes no warranty of merchantability and no warranty of fitness for any particular purpose; nor does it make any warranty, express or implied, of any nature whatsoever with respect to the product or its use. In no event shall the company be liable for delay caused by defects, loss of use, indirect, special, or consequential damages, or for any charges or expenses of any nature incurred without its written consent.

Technical Support

For technical support, you may send an email to info@shieldcreteinternational.com.

DISCLAIMER

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials and equipment used, as well as varying working conditions and environments beyond our control we strictly recommend carrying out intensive trials to test the suitability of our products regarding the required processes and applications. This data sheet is provided free of charge, and we do not accept any liability regarding the above information or regarding any verbal recommendation, except for cases where we are liable of gross negligence or false intention.

Conforming to the requirements of

