



ShieldPoly

F-15 HT

Aromatic Fast Set Pure Polyurea System

info@shieldcreteinternational.com
www.shieldcreteinternational.com

Product Description

ShieldPoly F-15 HT is a rapid setting, 100% solids, flexible, aromatic two-component pure polyurea. This odorless volatile-free elastomeric is specially designed for Mineral Processing applications including inner liner mills, float cells, CIL and other wet/dry applications, F-15 HT can be applied to concrete, most metal, styrofoam (EPS), spray foam and tank lining membranes. ShieldPoly F-15 HT gels in 8-12 seconds - it can be applied in single or multiple applications with minimum thickness being 1.5mm.

ShieldPoly F-15 HT properties include touch to dry of 30 – 60 seconds and will not hydrolyse or contaminate other materials due to its inert nature. ShieldPoly F-15 HT is moisture and temperature insensitive and will accommodate substrate movements while remaining strong.

Features

- ✓ Rapid Cure
- ✓ 1:1 Mix Ratio
- ✓ 100% Solids
- ✓ No VOCs
- ✓ Enhanced Color Stability
- ✓ 200% or Greater Elongation
- ✓ FLL Root Resistant
- ✓ ANSI/GRHC/SPRI VR-1 (2011) Root Resistance Compliant

Technical/Performance Data

Mix Ratio by Volume	1:1
Gel Time (Seconds), ASTM D1640	8 - 12
Tack-Free Time (Seconds), ASTM D1640	~30 – 60
VOC Content	0
Solids Content	100
Shore D Hardness, ASTM D2240	43 - 47
Shore A Hardness, ASTM D2240	NA
Elongation % ASTM D638, Type IV	345 - 680
Tensile Strength (psi), ASTM D638, Type IV	2000 - 2500
Tear Strength (lb./in.), ASTM D624, Die C	335 - 465
Adhesion to Concrete (psi), ASTM D7234	>200
Taber Abrasion, mg wt loss, ASTM D4060 (1000g, C-17 Wheel, 1000 Cycles)	15 – 25mg loss
Water Vapor Transmission, ASTM E96, Proc A permeability (80mils), grams/Pa*s*m	5.46E-11

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

Limitations

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

Applications

- ✓ Steel Coatings
- ✓ Concrete Coatings
- ✓ Over Styrofoam / Spray Foam Coatings
- ✓ Tank Liners
- ✓ Waterproofing
- ✓ Wear Courses
- ✓ Resilient Surface Coating

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 ShieldCrete® International for more support.

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 ShieldPoly F-15 HT. For additional information, please review the material processing and handling guide or contact a member of ShieldCrete® International technical support team.

Installation Temperature: -40°F to 300°F

Exposure Temperature: -40°F to 350°F, Dry

Colors

ShieldPoly F-15 HT 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.

Manufactured to the requirements of

