

# Brush Grade PolyFlo Polyurea

# Spec Data

PolyFlo- Brush Grade Polyurea is a *state of the art* 100% solids, flexible plural component elastomeric brush grade repair material. Brush Grade Polyurea is based on proprietary polyurea polymers and a modified amine curing mechanism. Brush Grade Polyurea is designed to be mixed by hand and applied using a brush technique giving rapid and consistent cure in applications ranging from -20°F to 300°F. The Brush Grade system is specifically designed for repair of the PolyFlo spray polyurea elastomer systems. Applications can be reopened to traffic and service in 60 minutes. Can also be utilized for casting type applications. Brush Grade Polyurea has no VOC's.

## Advantages

Fast cure. Short down time.  
High strength.  
Bridges moving cracks to 1/16".  
Seamless and flexible.  
Waterproofs.  
Accepts vehicular traffic.  
Temperature tolerant.  
Resists thermal shock.  
Resistant to many chemicals.  
May be top coated for added chemical resistance.  
No VOC's.  
USDA/Agriculture Canada approved.

## Typical Repair Uses

Containment Areas  
Pipe Line Coating  
Floor and Wall Systems  
Cold Storage Areas  
Waste Water Liners  
Tank Linings  
Cooling Tower Liners  
Pulp and Paper Mills  
Mechanical Rooms  
Fertilizer Plants  
Petrochemical Facilities  
Basins and Reservoirs  
Waterproof Deck Coatings  
Digester Lining  
Chemical Plants  
Casting Applications

## Application

Apply Brush Grade Polyurea to clean, dry sound surfaces free of loose particles or other foreign matter. The "B" component resin blend, MUST be added to the "A" component at a 1:1 by volume ratio. Do small quantities at a time. Once the "B" component is added to the "A" component mix for 10-15 seconds. You will then have 10 minutes to get the product applied to the substrate. The existing coating around repair area must be abraded.

## Installation

Consult EPC,INC for an approved applicator and for job specific specifications. Apply to clean dry sound surfaces free of loose particles or other foreign matter. Consult EPC INC. for surface preparation and repair procedures.

## Limitations

Intended for industrial use. Although physical properties will not change, over a period of time color change and superficial oxidation may occur. Consult EPC,INC. for corrosive environment applications. Do not install in hydrostatic or moisture/vapor conditions. Avoid moisture contamination in containers. Refer to MSDS, Instruction Sheet and Product Labels .

## Mixing

Agitate resin blend "B" component THOROUGHLY with mechanical means such as paint mixer or jiffy mixer before use, to disperse pigment. Do not thin. (CAUTION – do not agitate in air and moisture.)

PHYSICAL PROPERTIES	TEST METHOD	VALUE
Elongation	D-638	530%
Tensile Strength	D-638	2440 psi
Shore Hardness	D-2240	D-50
Tear Strength	D-624	525 pli
Moisture Vapor Transmission	E-96	0.025 perm
Abrasion Resistance (wt. loss mg) 1000g., 1000 rev. H-18 1000g., 1000 rev. CS17	D-4060 D-4060	200mg <5 mg
Coefficient of Thermal Expansion	C-531	4x10 <sup>-3</sup> (1in/1in/C)
Flash Point, components		>200°F
Flame Spread	E-108	Class A (Comparable to UL 790)
Gel Time / Tack Free		5/20 minutes
Flexibility Testing Gardner Impact in.-lbs (on 1/32 Steel Panels) Direct and Indirect	D-2794	>160 in.-lbs
Mandrel Bend Conical Bend (on 1/32" steel panels) ¼" Mandrel 25°C (free film 30-50 mils) ¼" Mandrel -20°C (free film 35-50 mils)	D-522 D-1737 D-1737	Pass Pass Pass
Puncture Resistance, lbs.	D-4833	275 lbs.

**Environmental Protective Coatings, Inc.**  
2035 Regency Rd. Suite 5  
Lexington, KY 40503  
PH: (800) 928-COAT Fax: (859) 278-4973  
Mail: homerhartepc@aol.com

## Storage/Shelf Life/Precautions

Brush Grade Polyurea components must be stored in their original unopened containers at temperatures between 65°F and 95°F. If the drum temperature falls below this for a few hours the material may increase in viscosity. If this occurs product may be heated to room temperature to reduce the viscosity. Storage at lower temperatures may cause product to freeze, in this event call EPC,INC. In an excess of 100°F a nitrogen atmosphere is recommended for the "B" side.

Shelf life of the materials when kept in unopened sealed containers at the recommended storage conditions is six months. Containers shall not be opened until ready for immediate use. Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected. Carbon Dioxide gas can result in buildup of pressure inside the closed container. Extreme care must be used to ensure that the containers remain dry and avoid any moisture contamination. Do not attempt to use contaminated material or reuse containers.

## General Safety

Read and understand the MSDS provided with all shipments. Always protect eyes and skin. Strictly adhere to the Society of Plastics Industry Safety Standards.

**Eye Protection:** Safety glasses, goggles, or a face shield are recommended.

**Skin Protection:** Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing.

**Respiratory Protection:** Use a respirator approved for isocyanates. Always use products with adequate ventilation and use required PPE. For confined space use fresh air supply.

**Ingestion:** Do not ingest internally. It is believed ingestion of polymeric isocyanates would not be fatal to humans but may cause inflammation of mouth and stomach tissue.

**Warning: Contact with skin or inhalation of vapors may cause an allergic reaction. Avoid eye contact of the liquid or spray mist.**

*The information herein is believed to be reliable, but unknown risks may be present. No warranties, express or implied, including patent warranties or warranties of merchantability or fitness for use, are made by EPC, with respect to products or information set forth herein.*

*The potential user must perform any pertinent test in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer, EPC., INC is not responsible for surface*

*preparation specifications other than to suggest proven practices for each situation. Every surface is different as is every condition. A list of standard practices are available for your help. Any representative or distributor of EPC,INC. can not be held liable as they are not the contractor or applicator effecting the finished polymer. The applicator is responsible for having a working knowledge of the product and equipment.*

*EPC, INC makes no warranty as to the quality of any product altered in any way after it leaves the manufacturing plant. The Buyer assumes all risks whatsoever as to the use of these materials and buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the purchase price of the materials. Failure to adhere to any recommended procedures shall relieve EPC, INC. of all liability with respect to the materials and the use thereof.*

*The aforementioned data on this product is to be used as a guide and is subject to change without notice.*

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Lexington, KY 40503  
PH: (800) 928-COAT Fax: (859) 278-4973  
Mail: homerhartepe@aol.com

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