

**PRODUCT DESCRIPTION**

Powerflex 545 is a high performance polyurethane-polyurea based elastomeric coating specially designed to provide superior abrasion, chemical and water resistance performance by regular methods of application.

**PRODUCT FEATURES**

- Excellent flexibility & hydro insulation characteristics
- High film build in one coat
- Applied by brush, roller, squeegee and spray by conventional or plural-component spraying equipment such Graco XM Series
- Excellent hydrophobic & waterproofing performance
- Cures in cold weather with temperatures down to -10°C (15°F).
- Good abrasion and chemical resistance
- Outstanding hardness

**TYPICAL USES**

- Long term protection of steel, wood and concrete surfaces
- Effective protection on exterior high abrasion surfaces

**TECHNICAL DATA**

|                                       |                                    |  |  |
|---------------------------------------|------------------------------------|--|--|
| <b>Colors:</b>                        | Any color                          | <b>Drying times (20°C) based on 20 mils (0.5 mm) DFT</b> |  |
| <b>Gloss:</b>                         | Satin                              | <b>Tack free :</b>                                       | 30 - 40 min  |
| <b>Solids by volume:</b>              | 84 – 86 %                          | <b>To recoat:</b>  | 5 hours  |
| <b>Solids by Weight:</b>              | 89 - 91 %                          | <b>Hard</b>  | 6 - 7 hours  |
| <b>Theoretical Coverage of 1 mil:</b> | 1345 ft <sup>2</sup> / U.S. gallon | <b>Pot Life</b>  | 20 - 30 minutes without dilution<br>40 minutes with 20% dilution |
| <b>D.F.T. at 25 microns:</b>          | 115 m <sup>2</sup> / 3.78 liters   | <b>Reduction solvent (if necessary):</b>                 | 300  |
| <b>Recommended WFT:</b>               | 18 – 20 mils                       | <b>Dilution:</b>   | 10 % by volume   |
|                                       | depends on the application         | <b>(if necessary)</b>                                    |  |
| <b>Dry film thickness:</b>            | 15 -18 mils                        | <b>Catalyst:</b>   | 545C   |
|                                       | depends on the application         | <b>Mixing Ratio:</b>                                     | 1:1 by volume  |
| <b>Kit Viscosity:</b>                 | 80-100 ku                          | <b>Shelf life:</b>                                       | 24 months @ 25° C unopened                                       |
| <b>Kit Specific gravity:</b>          | 1.2 - 1.45 kg/l                    | <b>Packaging Base:</b>                                   | 3.78L (1 U.S. gallon) in 11.34L                                  |
| <b>Flash Point:</b>                   | 24°C (75.2°F)                      | <b>Catalyst:</b>   | 3.78L (1 US gallon)  |
| <b>V.O.C.:</b>                        | 250 grams/liter 2.08 lbs / US gal  | <b>*Data may vary for different colors</b>               | Keep in cool dry area  |
| <b>Shelf life:</b>                    | 24 months @ 25°C (77°F) unopened   |  |  |

**APPLICATION GUIDE**
**SURFACE PREPARATION**

Remove all detrimental foreign matter such as oil, grease, dirt, soil, salts, drawing and cutting compounds and other contaminants from surfaces.

**MANUAL APPLICATION:**

Application by spray, brush, roller (synthetic roller with 1/4-1/2 inch nap) or squeegee. Always smooth applied surface with roller 5 minutes after application by squeegee.

**MIXING AND THINNING**

First, power mix the base portion Powerflex 545 until it becomes homogenous.  
 Secondly, add catalyst 545C slowly with contained agitation until the both base & catalyst parts are well mixed together. Then product is ready for immediate use.  
 Dilution when applied by: Air spray and airless spray: 10% dilution (by volume) with DE-300 if necessary.  
 Brush and roller or squeegee or special plural spraying equipment XM Series: No dilution is required.

**APPLICATION PROCESS**

| CONVENTIONAL SPRAY   |  | AIRLESS SPRAY          |                          |
|----------------------|--|------------------------|--------------------------|
| <b>Spray gun:</b>    | DeVilbiss JGA-510, MBC-510 or equivalent | <b>Atomizing Air:</b>  | 45 - 75 lbs              |
| <b>Fluid Tip:</b>    | E fluid tip                              | <b>Fluid Pressure:</b> | 15 - 20 lbs              |
| <b>Air Cap:</b>      | 704 or 765                               | <b>Hose:</b>           | 1/2 in, 50 ft length max |
| <b>Air pressure:</b> | 50 – 55 psi                              |                        |                          |

**PHYSICAL PROPERTIES**
**Properties under tension:**

**Resistance to tearing:**  
 (ASTM D 624-C) Tensile = 7.5 Mpa

**Indication of hardness:**  
 (ASTM D 2240) 80 - 85 Shore A

**Impact:**  
 (ASTM D 2794) Direct: 140 in/lb  
 Reverse: 120 in/lb

**Taber abrasion resistance:**

(ASTM D 4060) 1000 cycles, 1000g load, CS-17 wheel: 120 - 130 mg loss

**Properties under tension:**  
 (ASTM D 412-C) Ultimate elongation 90 - 100%

See the material safety data sheet and product label for complete safety and precaution requirements.

**DISCLAIMER:**

"The following is made in lieu of all warranties, expressed or implied: Manufacturer's obligation shall be to replace such quantity of the product proven to be defective. The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product. Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith. All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc. The information contained herein is subject to change without notice. Consult your representative for a current data sheet. The foregoing may not be altered except by an agreement signed by the officers of the manufacturer."