

### DESCRIPTION

**Polyflex 203**, a high-performance aliphatic Polyurea membrane designed to provide excellent waterproofing, corrosion and abrasion resistance in a variety of climatic conditions. Its aliphatic structure ensures strong color retention for outdoor applications. It also provides excellent protection and durability in continuous water immersion and roofing applications.

### PRODUCT FEATURES

- Superior anti-corrosive protection for steel
- Protective membrane on metal, masonry, wooden reservoirs, silos and a variety of pipes and stone slabs
- Outstanding color retention
- Excellent abrasion resistance
- Fast drying, back in service rapidly
- Can be used to repair or replace existing membrane
- Easy to apply

### RECOMMENDED USES

- Waste-water treatment plants
- Waterproofing concrete
- Pulp and paper mills
- Roofing
- Corrosion protection for steel
- Food processing facilities
- Refineries

### TECHNICAL DATA

<b>Color:</b>	Available in several colors	<b>Flash Point:</b>	> 149°C (300.2°F)
<b>Type of Cure:</b>	2 components	<b>V.O.C.:</b>	0
<b>Binder:</b>	Aliphatic Polyurea	<b>Drying times:</b>	
<b>Solids by volume:</b>	100 %	<b>Gel Time:</b>	5 - 10 seconds
<b>Solids by Weight:</b>	100 %	<b>Tack Free:</b>	1 – 2 min
<b>Theoretical Coverage of 1 mil:</b>	1604 ft <sup>2</sup> / U.S. gallon	<b>To recoat:</b>	12 hours
<b>D.F.T at 25 microns:</b>	149m <sup>2</sup> / 3.78 litres	<b>Hard:</b>	8 hours
<b>Recommended D.F.T.:</b>	20 - 80 mils	<b>Catalyst:</b>	203C
	500 - 2000 microns	<b>Ratio:</b>	1:1
<b>Resin viscosity:</b>	100 - 400 CPS @ 25°C (77°F)	<b>Shelf life:</b>	1 year
<b>Isocyanate viscosity:</b>	200 - 500 CPS @ 25°C (77°F)	<b>Packaging:</b>	18.93 litres (5 U.S. gallons) 205 litres (55 U.S. gallons)



### APPLICATION GUIDE

**SURFACE PREPARATION:** See Polyval's Polyurea Application Guide

**CLEANING INSTRUCTIONS:** Cleaning agent: Toluene, Xylene, MEK. To reduce the risk of fire, use glycol ether acetate or any enviro-friendly chlorinated solvent

**APPLICATION PROCESS:** Plural component heated pump. In order to obtain the optimum results outlined below system must be capable of applying at a pressure greater than 2,500 PSI at a temperature of 60°C (140°F). Before application, the receiving coat surface must be cleaned of dirt, soluble salts, dust, oils, grease, chalking, and contaminants. Normal preparation includes vacuum, blow-off, SSPC-SP-1 "solvent cleaning," or water-wash containing salt solubilizing agents. This product is normally applied over previously primed surfaces. For more details on the surface preparation of the primer, see that specific data sheet. Scuff sanding is required before recoating. Clean in accordance with SSPC-SP-1 "solvent cleaning" before recoating. *Take care to ensure that proper film thickness is achieved. For more information, consult the Steel Structures Painting Council (SSPC) publication, Good Painting Practice.*

**Recommended set-up temperature should be 49-60°C (120 - 140°F), Pressure 2000 - 2500 psi.**

### PHYSICAL PROPERTIES

**Properties under tension:**

(ASTM D 412-C)

Ultimate Elongation = 1000 %

(ASTM D 412-C)

Tensile Strength = 12.07 N/mm<sup>2</sup> (1750 PSI)

**Indication of hardness:**

(ASTM D 2240)

90 Shore A

**Resistance to tearing:**

(ASTM D 624-C)

Tear strength = 52.6 N/mm (300 PLI)

**Impact resistance:**

(ASTM D 2794)

Direct @ 77°F (25°C): > 160 in-lb. (>18 joules)

Reverse @ 77°F (25°C): > 160 in-lb. (>18 joules)

Direct @ -4°F (-20°C): > 160 in-lb. (>18 joules)

Reverse @ -4°F (-20°C): > 160 in-lb. (>18 joules)

**Taber abrasion resistance:**

(ASTM D-4060)

1000 cycles, 1000g load

Abrasion wheel type	Average weight loss
CS - 10	N.D.
CS - 17	12.6 mg
H - 18	509 mg

**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." © Polyval Coatings Inc. Polyflex and Polyval are registered trademarks of Polyval Coatings Inc. All Rights Reserved.

Keep in cool and dry area. See the material safety data sheet and product label for complete safety and precaution requirements.

Chemical resistance information is currently being updated according to ASTM standards. Please contact your local representative for an update.