PC-705PW

Aromatic Fast Set Pure Polyurea
- AS/NZS4020 CERTIFIED POTABLE WATER

Technical Data Sheet

1. Product Information

Description

PC-705PW is a fast set, rapid curing, 100% solids, flexible, two-component pure polyurea elastomer spray coating material for potable water applications. **PC-705PW is potable water approved in accordance with AS/NZS4020 barrier material**. PC-705PW is used by itself or in combination with other materials to produce coatings, liners, wearing courses, and resilient surfaces on concrete and other substrates. Its extremely fast gel time makes it suitable for applications down to -30°C without special conditioning of the component resins and isocyanates. PC-705PW produces an extremely tough film at all thicknesses. PC-705PW is inert, it will not hydrolyze, leach, or contaminate other materials and is bondable and paintable. PC-705PW is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Features

- food safe
- high tensile strength & elongation
- high tear resistance
- high abrasion resistance
- does not deteriorate over time
- resistant to root growth
- resistant to hydrolysis
- permeable to water vapour diffusion
- resistant to microbes

Limitations

Cannot be used in situations of extremely high or low pH, coupled with high temperature immersion. Contact The Polyurea Company for a more suitable system.

2. Product Use

Applications

- salt water / sewage
- diluted acids and alkalis
- flexible at low temperatures, down to -40°C
- dry temperature max. 140°C
- ground and surface water
- mineral oils, diesel fuels
- resistant to root growth

Coverage Rates

Mils	10	15	50	60	80
Sq. Ft.	160	107	32	27	20

The above figures are estimated coverage rates and can vary on the substrate condition and texture.

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 Polyurea Company for more support.

3. Physical Properties

Mix Ratio by Volume	1:1
Gel Time (Seconds), *ASTM D1640*	8 - 12
Tack-Free Time (Seconds), *ASTM D1640*	20 - 30
VOC Content	0
Solids Content	100
Shore D Hardness, *ASTM D2240*	40 - 45
Shore A Hardness, *ASTM D2240*	NA
Elongation % *ASTM D638, Type IV*	>350%
Tensile Strength (psi), *ASTM D638, Type IV*	2800-3000
Tear Strength (lb./in.), *ASTM D624, Die C*	425-480
Taber Abrasion, *ASTM D4060 (CS-17 Wheel, 1000 Cycles)*	15
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.

4. 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 PC-705PW. For additional information, please review the material processing and handling guide or contact a member of The Polyurea Company technical support team.

Installation Temperature: -40°F to 300°F
Exposure Temperature: -40°F to 350°F, Dry

5. Colors

Blue.
Due to raw material variations and manufacturing techniques, a slight colour / batch difference may occur.

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6. Packaging

106 Gallon Kit
53 Gallon Part-A (Isocyanate) and 53 Gallon Part-B (Resin).

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

7. 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).

8. 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

9. Maintenance

No Information Provided

10. 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.

11. Warranty

At its sole election, The Polyurea Company will refund the price of or replace product it finds to be defective provided the product has been used properly and installed by a certified The Polyurea Company 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.

12. Technical Support

For technical support, please you may send an email to support@thepolyureacompany.com.

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Notes: Not Available

Conforming to the requirements of

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018