1007 Poly♦Urea Spray

Description

1007 PolyUrea is a two component 100% solids, rapid set high performance polyurea fast set spray elastomer coating formulated for high physical properties, hydrolytic stability, and low permeability.

Unique Properties:

8 to 20 second set time
Tack free in 30 seconds
Higher bond strengths to substrate 400% elongation

***Formulated for flex strength and adhesion with high tensile strength*

The 1007 PolyUrea is a *true polyurea* and not a hybrid.

Application substrate temperatures; -20°F to 200°F. The 1007 is applied via a Graco Reactor Hydraulic Proportioner or Arma Proportioner or equal. Use B side agitator and feed pumps for A and B drums.

1007 conforms to the requirements of the USDA for incidental food contact.

Advantages

- Excellent elongation – 400%+
- Excellent For Containment, Refineries, Chemical Plants, Marine Applications and Other Industrial Facilities
- Designed to chemically bond to ASTC Primers
- Protects Concrete and Other Surfaces, Wood, Metal, etc.
- Chemical Resistant
- High Impact & Abrasion Resistance

Use Areas

- Secondary containment with non-skid
- Corrosive barrier, protective coating Protection - processing equipment
- Concrete tanks & steel tanks
- Secondary containment walls and floors
- All industrial service surfaces
- Geotextile Containment Applications

Speed & Set Time:

Adjustable from a gel time of 8-20 seconds and a set time approximately 10 to 30 seconds.

Moisture Vapor Reduction:

1007 should be applied to concrete surfaces as part of a "systems approach". Since concrete will out-gas causing pinholes, using the CMW vapor barrier treatment for the concrete and the Penprime as the primer, pinholes are reduced.

Priming:

1007 cross-links with the ASTC primer PenPrime and produces excellent results when used together as a system.

Note: The best spray application results are obtained coating concrete when the ambient temperature is decreasing. In applications where it is not possible to use the temperature to your advantage it is suggested that the ASTC's CMW be used in conjunction with PenPrime and the polyurea coating.

Color:

Black, Dark Gray, Tan

General Physical Characteristics

Solids	100%
Shelf Life	1 year
Hardness ASTM D2240	A 95
Mix Ratio	1:1
Density ASTM D1622	70
Abrasion ASTM D1630	530 NBS
CS-17 wheel w/1000gm/500 cycles	
Tack Free ASTM D2471	30 sec.
Tensile ASTM D412	3600
Tear Strength ASTM D470	420 lbs./in.
Gel Times	8-20 sec.@ 75°F
Elongation ASTM D124	635%
Processing Temperature	160°F
Viscosity @ 75°F cps,	A 800-1200, B 600-900
V.O.C. Content	0 grms/ltr
Permeability ASTM E96	0.0947
Maximum mils per coat	unlimited
Maximum Vessel Heat Exposure	350°F
Non-pressurized, *avoid "cold wall" effect.	

Preparation:
Concrete must have a minimum 28 day cure prior to application. Remove any curing agent, form release materials, oils, wax, moisture or any material that may affect bonding. Clean and wash to remove contaminants and maintain pH 8.0-11.0.
Perform a Moisture Vapor Test before making the coating application on concrete. Provide rough surface profile minimum 2-3 mils. Seal/repair all bug-holes, cracks and spalls, see ASTC data sheets on 830, 4034 and 3004 (joints).

Prime:
Prime with ASTC primer PenPrime. Prime 2-4 hours prior to the 1007 application for best results. Spray the polyurea on the primer only after the primer has become tack free.

Application:
Use only heated high pressure equipment & impingement gun equipment, fluid pressure of 2,000 psi. Minimum heat 160ºF. Surface temperature -20ºF to 120ºF. Apply at not less than 5ºF above dew point.
Apply at specified mil thickness over primer as required for the application.
Spraying 1007 requires special equipment, user must be a professional applicator qualified in the use of high performance polyurea materials and specialty application equipment.

Limitations:
Do not use on wet surfaces or expose part A to moisture. Keep out of direct sunlight, store drum kits on wood pallets at room temperature. Always mix the part B before using, continue agitation of Part B during application. Pre-heat drums as needed per environmental temperature. Best results over vapor barrier and/or compatible primer.

Shelf Life:
1 year, store between 40°F and 100°F.

Finish:
The finish of this product is best using a stipple surface with the 1007 over freshly applied 1007.

Components:
Two part system; 1:1 ratio

Packaging:
110 gallon kits
VOC Content:
0gms/1 or 0.0 lbs/gal
Potlife:
none
Curing Time:
As soon as the sprayed surface will allow access not more then 1-1.5 hours after first application. Full cure in 24 to 48 @ 70°F.

Limitations:
Do not use on wet surfaces or expose part A to moisture. Keep out of direct sunlight, store drum kits on wood pallets at room temperature. Always mix the part B before using. Pre-heat drums as needed per environmental temperature. Best results over vapor barrier and/or compatible primer. Protect from cold during storage and shipping.

Shelf Life:
1 year, store between 40°F and 100°F.

Packaging:
110 gallon kits

VOC Content:
0gms/1 or 0.0 lbs/gal

This product is for use by professional applicators only. Wear Protective Clothing and gloves as the product bonds very well to fabrics. Read MSDS before using this product. DOT/Flash Point – Non-flammable Liquid Classification, not regulated. Warranty: See ASTC Polymers, Inc. Warranty data sheet. (2-13) Product data sheets subject to change without notice. © 2010 ASTC Polymers, Inc .