



# COATLOK™ U-290

## TECHNICAL DATA SHEET

**Coatlok™ U-290** is a two-component polyurea elastomer, 100% solid, no VOC's. The system is based on amine-terminated resins and diphenylmethane diisocyanate (MDI) prepolymer. It can be used as a containment membrane with or without geotextile fabric. Coatlok U-290 can be sprayed on steel, concrete, foam plastic, etc. With its fast reactivity, the product can be applied to horizontal and vertical substrates.

Common Uses: Walls, exterior containment, floors with little fork traffic.

PHYSICAL PROPERTIES			
Tensile Strength	1900 – 2200 psi	13.1 – 15.2 Mpa	ASTM D 412 C
Elongation	900 – 1000%		ASTM D 412 C
Shore A Hardness	85 – 90		ASTM D 2240
Tear Resistance	300 – 350 pli		ASTM D 624
Water Vapor Transmission	0.12 – 0.13 perm-inch		ASTM E 96
Low Temperature Flexibility (@-20°)	No visible cracks - Pass		ASTM D5147-18, Section 12
Crack Bridging Ability (@-26°C & 20°C) - modified	No Visible Cracking, No Pinholes, No Splitting - Pass		ASTM C1305/C1305M -16
Nail Sealability	No sign of water around nail - Pass		ASTM D1970-19, Section 7.9
Water Absorption, wt%	2.1%		ASTM D5147-18, Section 10
Peel Adhesion on Concrete	6.14 N/mm		ASTM D903-98 (2017)
Peel Adhesion on Densglass	0.20 N/mm		ASTM D903-98 (2017)
Water Resistance (55cm water head, 5 hours duration)	No leakage of water - Pass		AATCC 127-08
Peel Adhesion on Plywood	6.87 N/mm		ASTM D903-98 (2017)
Hydrostatic Pressure Resistance (100psi) Sustain 100 psi lateral water pressure for >1 hour	Pass		ASTM D5385-20

LIQUID COMPONENT PROPERTIES*		
PROPERTY	U-290-A	COATLOK U-290 B
Color	Yellow	Transparent pale yellow, can be colored
Viscosity @ 77°F (25°C)	900 – 1400 cps	500 – 1000 cps
Specific Gravity @ 77°F (25°C)	1.07 – 1.09	0.98 – 1.12
Shelf Life of unopened drum properly stored	6 months	6 months
Storage Temperature	59 – 86°F (15 – 30°C)	59 – 86°F (15 – 30°C)
Mixing Ratio (volume)	1:1	1:1

\*See SDS for more information.

REACTIVITY PROFILE	
Gel Time @ 77°F (25°C)	
10 – 15 seconds	

RECOMMENDED PROCESSING CONDITIONS*		
Initial Primary Heater Setpoint Temperature	150°F	65°C
Initial Hose Heat Setpoint Temperature	150°F	65°C
Initial Processing Setpoint Pressure	2000 – 2500 psi	13790 – 17237 kPa
Substrate & Ambient Temperature	> 23°F	> -5°C

\*It is the sole responsibility of the applicator to process and apply Coatlok U-290 within specification.

**General Requirements:** Equipment must be capable of delivering the proper ratio (1:1 by volume) of isocyanate and resin at adequate temperatures and spray pressures. Substrate must be at least 5°F above dew point, with a maximum relative humidity of 80%. Substrate must also be free of moisture (dew or frost), grease, oil, solvents and other materials that would adversely affect adhesion of the product. This product must not be used when the continuous service temperature of the substrate or product is below -10°F (-23°C) or above 140°F (60°C).

**Disclaimer:** The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred. All patent rights are reserved. The product is combustible and must be protected in accordance with applicable codes. Protect from direct flame and spark contact, around hot work for example. The exclusive remedy for all proven claims is replacement of our materials.