



ROMTECH
CONSTRUCTION, INC.



POLYUREA Coating Systems

Seamless Waterproofing Membrane

Ultra Fast Cure • High Performance • Super Strength

POLYUREA COATING SYSTEMS

What have been said about Polyurea...

- ★ *the next step in coatings evolution*
- ★ *a wonder product*
- ★ *the new gold standard in waterproofing*
- ★ *the ultimate coating solution*
- ★ *greatest invention (non medical) in the last few generations*

The Polyurea Development Association (PDA), the polyurea industry's (in the U.S.A.) trade association has developed a "formal definition" to help suppliers, engineers, specifiers and contractors differentiate between real polyureas and other materials that "claim" to be polyureas.

Definition

A polyurea coating / elastomer is that derived from the reaction product of an isocyanate component and a resin blend component. The isocyanate can be aromatic or aliphatic in nature. It can be monomer, polymer, or any variant reaction of isocyanates, quasi-prepolymer or a prepolymer. The prepolymer, or quasi-prepolymer, can be made of an amine-terminated polymer resin, or a hydroxyl-terminated polymer resin.

The resin blend must be made up of amine-terminated polymer resins, and/or amine-terminated chain extenders. The amine-terminated polymer resins will not have any intentional hydroxyl moieties. Any hydroxyls are the result of incomplete conversion to the amine-terminated polymer resins. The resin blend may also contain additives, or non-primary components. These additives may contain hydroxyls, such as pre-dispersed pigments in a polyol carrier. Normally, the resin blend will not contain a catalyst(s).

Advantages

Ultra Fast Set (5-15 seconds), fully cures in a few hours
Short down time, facility can be returned to service in 24 hrs.
Can be applied on vertical or inclined surfaces without sagging
100% solids, zero to low VOC, non-toxic
Weather Tolerant: cures at -25°F to >300°F
Moisture Insensitive, Application Unaffected by High Humidity
Excellent Physical Properties Including tensile strength, tear strength, and elongation.
High Abrasion Resistance
Seamless and Resilient
Excellent Adhesion to Properly Prepared Substrates
Excellent Resistance to Thermal Shock
Waterproof, Root-proof
Resistant to Solvents, Caustics and Mild Acids
Heat and Fire Resistance
Unlimited Mil Thickness in One Application
Pigment compatible. Colorants can be added to change appearance and light-stability.

Applications

Waterproofing
Roofing, Leak Protection
Roof Coating
Flat Roof Repair
Corrosion Protection
Swimming Pools
Warehouse & Industrial flooring
Pipelines & fitting coatings
Shipping containers & rail car lining
Tank coatings
Truck Bed Linings
Flooring and Parking Decks
Waste Water Treatment Linings
Manhole & Sewer Linings
Theme Park & Decorative Design
Landscape & Water Containment
Automotive Fascia OEM Molded Parts
Railcar Lining & Track Containment

Chemical Structure



FAST SET (5-15 sec) • TOUGH • SEAMLESS • WATERPROOF • ROOT PROOF

PRODUCT RANGE

FLEXCOAT POLYUREA			
Product Name	ROM-PU300	ROM-PU600	ROM-PH30
Type	Pure Polyurea	High Elongation	Hybrid Polyurea
Usage	Waterproof, anti-corrosive coating, lining		
Tack free time	~ 1 min	~ 2 min.	~ 1 min.
Tensile Strength (N/cm²)	> 1,500	> 1,200	> 1,000
Elongation (%)	300 ± 100	600 ± 100	200 ± 100
Hardness (Shore)	A90 ± 5	A80 ± 5	A85 ± 10

Product Name	ROM-PP100
Type	AWWA C222 satisfied
Usage	Pipe Coating
Tack free time	~ 1 min.
Tensile Strength (N/cm²)	> 2,200
Elongation (%)	< 100
Hardness (Shore)	D65 ± 5

	ROM-P110	ROM-P820
Type	Moisture Curing PU Primer	Modified Acrylic PU Top Coat
Pot Life	~ 60 min	~ 60 min
Post Curing Time	20 - 24 hrs.	20 - 24 hrs.

Polyurea Performance vs. Other Products

CHARACTERISTICS	POLYUREA	POLYURETHANE	EPOXY	POLYESTER	ACRYLIC
Physical strength	Low-High	Low-Mid	High	High	Mid-High
Elongation	High	High	Low	Low	Low-Mid
Impact resistance	High	Mid-High	Mid	Mid	Mid-High
Abrasion resistance	High	Mid-High	Mid-High	Mid-High	Mid-High
Adhesion to concrete	Low-High	Low-High	High	Mid	Low-Mid
Cure Shrinkage	Low	Low	Low	High	High
Permeability	Low	Mid-High	Low	Low	Low-Mid
UV resistance	Mid-High	Low-high	Low	Mid-High	High
Creep	Low	High	Low-Mid	Low-Mid	Low-Mid
Temperature limit	Low-High	Mid	Mid-High	Low-Mid	Mid
CHEMICAL RESISTANCE					
Mineral acids	Low-Mid	Low-Mid	Mid-High	Mid-High	Mid
Organic acids	Mid	Low-Mid	Mid	High	Mid
Alkalis	Mid-High	Low-Mid	High	Mid	High
Chlorinated solvents	Low-Mid	Low-Mid	Low-High	Low-High	Low-Mid
Oxygenated solvents	Low-Mid	Low-Mid	Low-High	Low-High	Low-Mid
Hydrocarbon solvents	Low-Mid	Low-Mid	Mid-High	Mid-High	Low-High
Salts	High	Mid-High	High	High	High
Water	High	Low-High	Mid-High	Mid-High	Mid-High

EXCELLENT ADHESION • NON-TOXIC • RESISTANT TO SOLVENTS & ABRASION

Machine & Guns for Polyurea



High Pressure,
Plural Component
System

GRACO REACTOR
EXP2



GRACO FUSION
Spray Gun

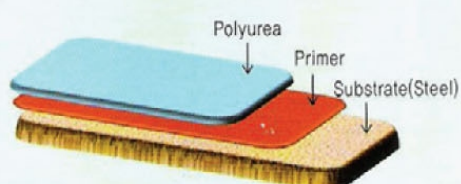


Reactor Hose

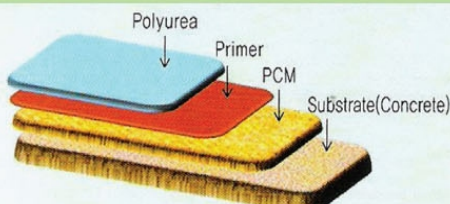


Transfer Pumps

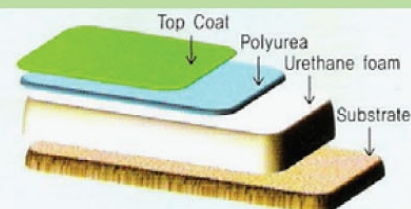
Steel Anti-Corrosive Coating



Concrete Structure Waterproof



Outside Insulation Protection



Tanks Anti-Corrosive Coating



Pipes Anti-Corrosive Coating



Storage Protective Lining



Swimming Pool Waterproofing



Roof Deck



Floor Coating



Sprayed PU Foam Top Coat



Thermal Storage



Sprayed PU Foam Coating



We have the world's best POLYUREA

Since being established in 2001, **ROMTECH CONSTRUCTION, INC.** has introduced a wide range of innovative products from sprayed polyurethane foam, epoxy coatings, mineral membranes and anti-root membranes and remains at the forefront of technical developments to meet the most stringent demands of the modern waterproofing industry. Our technological strength and recent expansion have led to **ROMTECH CONSTRUCTION, INC.** becoming one of the largest waterproofing-company in the Philippines. Continuous research and development of new products in collaboration with the world's best manufacturers and bold investments in technology has allowed us to succeed in gaining a big share of the Philippine market. With our extensive experience and know-how coupled with our deep pool of skilled workforce, we can service every sector with excellent quality and innovative waterproofing solutions.

Romtech's Environmental Commitment

Going for the Green Building initiatives



in partnership with





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