

HYBRON-W90

Hybrid Polyurea

TECHNICAL DATA SHEET



DESCRIPTION

Hybron-W90 is a 100% solids (solvent free), polyurea hybrid spray elastomer with outstanding abrasion resistance.

ADVANTAGES

- High abrasion resistance
- Safe for use with drinking water
- Exceptional toughness and flexibility
- Resistant to puncture and compression
- Safe to use. Contains no volatile or flammable solvents.
- Good chemical resistance to most dilute acids, alkalis, salts and solvents.
- Gels in seconds to form a thick-film seamless lining with a vice-like grip to most surfaces
- Protects against wear, chemical attack and corrosion
- Will not crack or flake and can bridge unintentional hairline cracks in concrete

APPLICATIONS

- Ideal as a waterproofing membrane
- Suitable for protective coatings, tank lining, jointing, anti-abrasion, anti-corrosion and chemical resistance
- When used in conjunction with Aralox primers and renders it the product of choice for concrete remediation, protection and tanking where a high strength, smooth, durable, seamless, easy to clean finish is required. It exhibits excellent adhesion to freshly blasted steel with or without primers.

PROPERTIES – RESIN (A) & HARDENER (B)

Property	Part A (Iso)	Part B (resin)
Density (kg/L)	1.11	1.00
Viscosity (Cps @ 25oC)	680-750	400
Pack Size (drums)	225kg	200kg

PROCESSING – OPTIMUM PARAMETERS

Proportioning pump	Graco E-XP2 or similar – heated, high pressure, plural component
Gun	Graco Fusion-AP or similar - Impingement mix, airless
Pressure of material at gun	2,000 psi
Temperature of material at gun	65°C
Relative Humidity	<85%
Dew Point	>5°C less than ambient

PROPERTIES CURED

PROPERTY	TEST METHOD	RESULT
Hardness	ASTM D 2240-91 Shore A	90
Elongation @ 24°C	ASTM D 412-92	450%
Abrasion Resistance	ASTM D460-10 (CS-17 @ 1,000rpm with 1,000g weight)	11 mg
Tensile Strength	ASTM D 412-92	18.6 MPa
Tear Strength	ASTM D 624-86	9.6 MPa
Puncture Strength (MPa)	CNS 14263 (1998)	5.33
Hydrostatic Pressure Resistance (0.1MPa/cm2, 30 mins)	CNS 10146 (1983)	No Leakage
Water Absorption (%) (230C, 24hrs)	CNS 4447 (1992)	1.04
Water Vapour Transmission (g/hr*m2)	ASTM E96-05	0.352
Solids (mixed) by volume		100
Flash Point	Pensky Martens Closed Cup	>149°C
Theoretical Coverage		1mm / m2 / litre
Early Fire Hazard	AS1530 Part 3 (1989)	2mm sample
Properties	Ignitability Index (0-20)	16
	Spread of Flame Index (0-10)	8-9
	Heat Evolved Index (0-10)	9-10
	Smoke Developed Index (0-10)	7
		ASTM D 1692-68
Gel time	250C	5 seconds (will remain "cheesy" for up to 15 minutes after gel)
Tack free time		60 seconds
Ready to walk on		5 minutes with care
Cure time		1 hour
Expose to water		1 hour
Full cure		7 days

Once Hybron gels and becomes tack free it will remain "cheesy" for up to 10 minutes. Care should be taken not to damage the coating during this curing time.