



PRODUCTS

SPRAY POLYURETHANE SYSTEMS

POLYUREA

Open Cell

Closed Cell



info@plutusticaret.com



www.plutusticaret.com



+90 545 611 35 48

PLSPOL 130 PRO

Open Cell

PLSPOL 130 PRO Open Cell is a two component, light density, one to one by volume spray-applied polyurethane foam. PLSPOL 130 PRO Open Cell is an insulation system designed for use in commercial and residential applications. Use in lieu of more traditional forms of insulating materials such as fiberglass, cellulose or other loose fill products. Typical areas where PLSPOL 130 PRO Open Cell is applied are exterior and interior walls, vented attics, un-vented attic assemblies and between floors. PLSPOL 130 PRO Open Cell has been formulated using water as the only foaming agent and is free of ethoxylated nonylphenol.

TYPICAL PHYSICAL PROPERTIES

Property	PLSPOL 130	Test
R-Value	3.7 @ 1" 13 @ 3.5"	ASTM C 518
Core Density	0.50 LB/ Cubic Foot	ASTM D 1622
Open Cell Content	> 80 %	ASTM D 2856
Water Vapor Transmission - Permeance	21 perms @ 1"	ASTM E 96
Air Impermeable	< 0.02 (L/s-m2) @ 3.5"	ASTM E 283
Tensile Strength (PSI)	> 3.0 psi	ASTM D 1623
Dimensional Stability	< 15%	ASTM D 2126

Fire Test Data

Evaluation Service	EUROLAB	
Building Types	Approved	I, II, III, IV, V-B: Nonstructural Insulation
Flame Spread	ASTM E84	material
Smoke Development	ASTM E84	Class I < 25



PLSPOL 300 PRO
Closed Cell

2 Component Polyurethane closed cell foam for spray application. Low free rise density in uniform foam structure. Polyol part contains special blowing agent for better insulation properties. Easy to cover huge areas by less amount of PU foam. Recommended uses area; every kind of concrete/bricks surface and wooden areas as wood finishing, shiplap, pergola areas etc. Covering edge and corners by excellent flowability performance.

PHYSICAL CHARACTERISTICS

PARAMETER	COMPONENT (A)	COMPONENT (B)	METHOD
Viscosity MPa.s at25°C	200-500	200-250	ASTM
Density kg/m³ at 25°C	1.10-1.20	1.20-1.25	DIN 51 757
Shelf Time - Month	12	6	-
Storage Temperature	15-25°C	15-25°C	-

REACTION PROFILE

PARAMETER	RESULT
Ratio By Volume (A:B)	100:100
Cream Time (s)	4-5
Tack Free Time (s)	8-10
Free Rise Density (kg/m3)	27-29

	UNIT	VALUE	STANDARD
Overall Density	kg/m3	31	ASTM D 1622
Core Density	kg/m3	28	ASTM D 1622
Compressive Strength	kPa	135	ASTM D 1621
Thermal Conductivity	mW/mK	22,33	ASTM C 518
Closed Cell Content	%	> 92	DIN EN 4590
Dimensional Changes	%	max 1%	DIN EN 2786

PLSPOL 400 PRO

Closed Cell

PHYSICAL CHARACTERISTICS

Applied density	35-40 kg/m ³
Initial thermal conductivity	0.022 W/m·K
Stirring time	3 ~5 secs
Gel time	9 ~ 10 secs
Tack-free time	12 ~ 14 secs
Close-cell content	>95% (CCC4)
Fire reaction	ASTM E84 A
Application method	Spray equipment

CHARACTERISTIC		POLYOL
N° OH	DIN 53240-2	180 ~ 220 mgKOH/g
Viscosity	BROOKFIELD VISCOSIMETER	<600 mPa.s
Specific weight		1.20 g/cm ³

CHARACTERISTIC		VALUE
Stirring time		3 ~5 secs
Gel time / tack-free time		9 ~10 secs / 12 ~ 14 seg
Free rise density / Applied density		32 ~36 kg/m ³ / 40 ~46 kg/m ³
Closed-cell content		>95% (CCC4)
Aged thermal conductivity value	EN-12667	0.028 W/mK
Fire reaction	ASTM E84	A
Water absorption by partial immersion		0.10 kg/m ²
Wapor water transmission	EN 12086	μ=102
Dimensional stability (-20°C/ 70°C,90%HR)	EN-1604	DS (TH)3 / DS(TH)1
Application temperature range (substrate and ambient)		5 ~ 40°C (41 to 104°F)
Max. relative humidity		90%
Max. substrate humidity (dew point)		0

Results were performed in the laboratory at 20°C (68°F) and 50% RH, under controllable conditions. These values may vary depending on the application, climatology, or substrate conditions

Advantages

Complete Coverage: Expands and adheres without shrinking or settling.

Energy-Efficient: Reduces air and moisture infiltration to the building envelope and provides continuous coverage for high thermal performance.

Air Barrier: Prevents leaks when installed at 1" thickness or more.

Wide Application Temperature Range: Can be applied between 20°F and 120°F , delivering consistent performance with seasonal versatility.

Faster Installation: Spray easily in a single pass from a minimum of .5" to a maximum of 3.5". Multiple immediate passes, with no wait time, may also be applied. See Data Sheet for complete information.



PACKAGING

Metal drums of 230 kg for the polyol, and 250 kg for the isocyanate.



PRODUCT DESCRIPTION

PLSISO PRO 100 and PLSCOAT PRO 100 is of double-component, reacting very quickly, solvent free, high pressure spray injection machines are applied with flexible and strong structure of pure polyurea systems. Polyurea used in constructions (Hotels, pools, shopping malls and such buildings) for waterproofing purposes.

Component A: Amine Resine: **PLSISO PRO100**
Component B: Prepolymer: **PLSCOAT PRO 100**

PHYSICAL CHARACTERISTICS

PARAMETER	COMPONENT (A)	COMPONENT (B)	METHOD
Viscosity, MPa.s, 40°C	380-420	100-300	ASTM D4878-98
Density, kg/m3, 25°C	0.95-1.05	1.10-1.25	DIN 51 757
NCO Content, %	none	16-17	-
Shelf Time, Month	12	6	-
Storage Temperature	15-25°C	15-25°C	-
Color	gray	yellow	-

REACTION PROFILE

PARAMETER	RESULT
Ratio By Volume (A/B)	100/110
Pot Life (s)	1-2
Tack Free Time (s)	20-25
Hardness (ShoreA)	85-95
Abrasion Resistance (mg)	<200
Elangation Amount (%)	%450-550
Strenght At Break (mPa)	100-180
Thermal Resistance (oC)	-30 / +100

APPLICATION FIELD

General waterproofing and anticorrosion applications; tanks, pools, swimming pools, ponds, pipes, pipelines, waste water facilities, manholes, sewer linings, roof and terrace coatings

Floors; industrial floors, manufacturing facilities, warehouses, hospitals, factories, parking lots and garages

Construction; roads , bridge decks, railways and high speed railways, tunnels, airports and line stripings

Marine industry; ship's underwater part and ship's decks protection and ship docks

Transportation; truck and pick up bed liners, steel containers

Industrial applications; oil and gas industry, mining, secondary containment and energy industry

Leisure industry; water parks, aquariums linings, play grounds and decorative applications

SUGGESTED APPLICATIN PROCESS

Enviromental Conditions

Mixing Ratio (Volume A/B)	100 / 100
Surface Temperature (oC)	10-30
Ambient Temperature (oC)	20-30
Relative Air Humidity (%)	25-50

