PLSCASE

PRODUCT DESCRIPTION

PLSiso PP 100 and PLScoat PP 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.

APPLICATION FIELD

- Pools
- Terraces
- Foundations
- Roofs
- Military Purpose

on by connecting to the ground through primers and without having any problem of joints and adhesion.

Component A: Amine Resine: PLSiso PP 100
Component B: Prepolymer: PLScoat PP 100

PHYSICAL CHARACTERISTICS

PARAMETER	COMPONENT (A)	COMPONENT (B)	METHOD
Viscocity, 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	6	6	-
Storage Temperature	15-25°C	15-25°C	-
Color	Gray	Yellow	-

SURFACE PREPARATION

Surface preparation strongly affect coating performance. Concrete substrates must be prepared mechanically using abrasive blast cleaning to remove cement laitance and achieve an open textured surface. Weak concrete must be removed and surface defects such as voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum. For application pull off strength of the surface should be min. 1.5 N/mm² and concrete residual moisture should be max. 4% pbw (with an appropriate moisture tolerant primer should be max. 6% pbw). The moisture content should be measured by moisture meter. Be aware of condensation; the substrate must be at least 3 °C above dew point to reduce the risk of condensation of the coating. Relative air humidity for application should be lower than 85%. Prior to application, confirm substrate moisture content, relative air humidity and dew point.

PRIMING

The application surface has to be primed in order to achieve an even surface and good adhesion. Lightly broadcasting with quartz sand 0,3-0,8 mm is recommended because this provides higher adhesion values and extends the maximum waiting time of primer prior to the application of polyurea cooating. In order to avoid the formation of blisters do not broadcast to excess. Polyurea Application: The polyurea must be applied within 12-24 hours of applying the primer. Isocyanate prepolimer and amine resin must be applied using a two component high pressure and heat spray machine. The machine should be able to spray the components in 1:1 volume ratio. Both components must be heated above 70 °C. In order to achieve good performance, the temperature and pressure should stay same during the application and must be controlled regularly. Polyurea system components might not diluted under any circumstances. Before application, amine component must be stirred at least 30 minutes using a barrel mixer until a homogenous mixture and color abtained.

SUGGESTED APPLICATIN PROCESS

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

REACTION AND PRODUCT PROFILE

PARAMETER	RESULT
Ratio By Volume (A/B)	100:100
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 (°C)	-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

*Tests are done manually in the laboratory. The test was done with the laboratory mixer at 3000 rpm. Component temperature set 20°C during the test. The given values will change for low pressure machine and high pressure machine. The given durations begin with mixing of the components.

STORAGE AND HANDLING

Materials should be stored in dry conditions away from direct sources of heat, preferably in the unopened original containers. Opened drums must be reclosed tightly immediately after drawing-off material.

HEALTH SAFETY AND ENVIRONMENTAL INFORMATION

Isocyanate and polyol component, respiratory organs, eyes and skin irritant. It can be allergic reaction, when inhale and in contact with skin. Attention should be paid when using these materials. MSDS information must be read before use. Waste Material Data Sheet Located Methods and Environmental Legislation should be disposed of in accordance.

Sultan Selim, Eski Büyükdere St. No:61 +90 545 611 35 48 info@plutusticaret.com