

UB-500

One component elastic polyurethane binder



This paint is a moisture-curing polyurethane binder based on polyurethane resin, designed for use as a flooring material. It complies with KS F 3882-2(Elastic surfacing for outdoor sports facilities) and SPS-KSSFIA1-1944(impact-absorbing surfaced flooring for children's playgrounds). The product is mixed with rubber chips and applied using a specialized spray machine. It provides excellent shock absorption and elasticity, helping to reduce pedestrian fatigue and physical strain. The unique texture and appropriately selected size of the rubber chips offer anti-slip performance, while a variety of colors and design patterns can be achieved. Elastic surfacing is a coating material applied to sports facilities, offering excellent adhesion and elasticity to provide superior walking comfort.

Usage	Flooring material for school sports facilities, multi purpose courts and concrete surfaces requiring elasticity
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Specification

Paint type	Polyurethane resin (one-component)					
Drying time	Category	Severy cold (below 5°C)	Winter (5~10°C)	Spring & autumn (10~20°C)	Summer (20~28°C)	Extreme summer (28°C이상)
	Dry-through	Within 24 hours		Within 12 hours	Within 6 hours	
	Over-coat (Min.)	Within 36 hours		Within 24 hours	Within 12 hours	
	Over-coat (Max.)	Within 72 hours		Within 48 hours	Within 36 hours	
	Pot life	Within 2 hours		Within 90 minutes	Within 1 hour	
Above drying time was measured under laboratory conditions after mixing the chips and binder, and may vary depending on the type of chips used and the actual site conditions						
Thinner	No dilution		Dilution rate	No dilution		
Specific gravity	Approx. 1.07±0.02					
Color	Clear		Solid volume ratio	97±2%		
Thickness of dried film	over than 12mm		Theoretical coverage	Chip : binder(UB-500) = 100 : 20		
Mixing ratio	One-component		Packaging unit	18Kg		
Shelf life	6 months		Gloss	Semi-gloss		

Product Properties (Physical Property Data)

Tensile strength	> 0.6 N/mm ²	Hardness	Shore E 40 ~70
Elongation rate	> 60%		

How to Use

Surface treatment	Cure concrete at a temperature of 21°C and relative humidity of 50% for at least 28 days. Completely remove oil, moisture, sand, dust, laitance, and other foreign substances from the surface to maintain its flatness.
Coating Conditions	Air temperature : 5~35°C , Surface temperature below 40°C, Relative humidity below 80% Moisture content of concrete below 6%
Coating Method	Apply smoothly on the undercoated surface using roller, etc. Using a dedicated mixer (60rpm<) mix the elastic binder and chips uniformly for at least 3 minutes After placement, spread the mixture to a uniform thickness and compact the surface using a heated roller (depending on summer 160°C, winter below 200°C) Primer : cleanthane 1000 or DHDC-1100AS or Urethane primer (Children's Playground Use (Group Standard Compliant Midcoat : UB-500 + chip (urethane, EPDM, waste tire)