

**Description**

CS-200 is an aliphatic two-component polyurethane non-skid coating that when fully cured forms a hard durable non-skid textured surface. This unique coating is formulated for exterior applications and has excellent retention of physical properties and color. CS-200 provides excellent resistance to corrosion, abrasion, chemicals and impact. CS-200 may be used on various metal substrates, wood, plastics and concrete, and is applied via conventional texture roller or sprayed with a simple hopper gun for textured coatings.

CS-200 may be used for exterior or interior industrial maintenance and product finishing where slip resistant texture surfaces and excellent long-term protections are required. This coating has been used successfully with urethane base coating on aircraft, railroad cars, ships, storage tanks, metal bridges, piping and structural steel, on concrete, wood and some plastics, including vinyl. Resistance of the coated parts to wear, weathering, corrosion and impact is rated with the highest of all commercially available coating types.

The flexibility of CS-200 is inherent in the basic polymer and not achieved by the use of plasticizers, therefore, the coatings are not subject to embrittlement with age.

**Application**

CS-200 may be applied using commercially available texture roller for solvent-based coatings or spray applied with a simple hopper gun commonly used for textured coatings.

Estimated coverage is 40 square feet per gallon for 40 dry mils, depending on porosity, roughness of surface, and product color. Note: dry film thickness of 30 mils minimum must be employed to form an adequate surface for slip resistance.

CS-200 is best applied between ambient temperatures of 55° F (13° C) and 95° F (35° C). The substrate temperature must be at least 5° F above the dew point at the time of application and at least 12 hours following application.

Re-coat time is three or four hours minimum at room temperature 77° F (25° C) when adequate humidity and good air circulation are available. For maximum inter-coat adhesion, re-coat within twenty-four hours. The use of heat will shorten re-coat and full cure times.

CS-200 is tack free in two hours and dries hard in twelve hours @ 77° F and 50% R.H. conditions. Room temperature cures of twenty-four hours permit light use. The coating is usually suitable for normal use in forty-eight to seventy-two hours but continue to develop full properties for the following three weeks. At cool temperatures (below 60° F) and/or low humidity (below 40%) the addition of catalyst may be required, and at higher temperatures (above 85° F) the addition of slow solvents may be needed.

Catalyst T-12 may be used to accelerate cure if acceptable curing conditions exist. Co-reactant catalyze T-12 may be used in the last topcoat when superior chemical resistance is required. This catalyst also provides accelerated cure in low temperature or low humidity conditions.

CS-200 can be thinned with Toluene or Methyl Ethyl Ketone (M.E.K.).

Proper surface preparation and priming are required in order to obtain the long-term protection that CS-200 provides. Use Ultra Prime 450 for old elastomer surfaces and Ultra Prime 350 and 450 for blasted steel surfaces.

CS-200 may be tinted just prior to use through the addition of a wide range of tinting concentrates available from Industrial Polymers for urethane coatings.

CS-200 may be cleaned up with paint strippers, which will facilitate removal of cured urethanes.

Positive fresh air ventilation is necessary. In confined areas use fresh air-supplied hood. In well-ventilated or open areas, use a chemical canister facemask or half-mask in accordance with 29 CFR 1910 134 (OSHA Standard) for specific vapors and vapor concentrations. Protect skin and eyes from spillage and over-spray. Avoid prolonged breathing of vapors and mists. Keep away from heat, sparks and open flame. Wash hands thoroughly after using and before eating or smoking.

The data shown in the following table illustrates the excellent chemical and solvent resistance of CS-200 when used with the appropriate primer. Chemicals, which will attack urethane coatings, are strong oxidizing acids like nitric and chromic, as well as some organic acids such as acetic at concentrations of 5% or higher. Also, some acids will cause color changes in certain green, yellow, orange, red and tan coatings.

Reagent	Solution (%)	Immersion	Splash or spillage
Acids, Inorganic Hydrochloric, Sulfuric & Phosphoric	10	Pass	Pass
Acids, Organic Acetic Citric/Lactic	5 & 10 10	Not Rec. Pass	Pass Pass

Alkalis Sodium Hydroxide Ammonium Hydroxide	10 10, 50	Pass Not Rec.	Pass Pass
Salts Sodium & Calcium Chloride	20	Pass	Pass
Solvents Aliphatic 1 * Aromatic 2 * Alcohol's 3 * Ketones & Esters 4 *	----- ----- ----- -----	Pass Pass Pass Pass	Pass Pass Pass Pass
Miscellaneous Sea Water (Synthetic) Water at 160° F	----- -----	Pass Pass	Pass Pass

1. Aliphatic Solvents – gasoline, hexane, JP-4, brake fluid
2. Aromatic Solvents – xylene, toluene
3. Alcohol's – ethyl, ethylene glycol, glycerol (note: fail in methyl alcohol immersion)
4. Ketones & Esters – acetone, methyl ethyl ketone, ethyl acetate

**Typical Properties**

	Viscosity	Specific Gravity	Weight Per Gallon
Component A			
Component B			
Mixed			

Mixing Ratio	
By volume	
By weight	

Work life	
Set time	
Set time and Demold depend on temperature and relative humidity	

**Physical Properties**

	Test Method	Value
Hardness		Shore
Tensile strength		
Elongation		
Tensile modulus		
Tear strength		

**Storage  
Shelf Life**

CS-200 Non-Skid Coating is shipped from the factory in sealed containers. The containers should be stored in a cool, dry area that is protected from direct sunlight and moisture. Storage temperatures should not exceed 80° F. The shelf life of factory sealed containers stored under these conditions is six months. Containers that have been opened should be resealed immediately after material has been removed in order to prevent solvent evaporation.

**Packaging**