

**Areas of Use:**

- Clear Coat
- High Gloss ( Available in Lo Sheen)
- Primed or sealed concrete surfaces.
- Industrial floors.

**Product Description:**

MCU 12 Urethane is a clear high gloss, stain or matt topcoat. It is an aliphatic non-yellowing, single component, quick drying urethane dispersion that is ideal for interior or exterior applications. MCU provides excellent adhesion over prepared substrates. Dry time is between 30 and 45 minutes depending on temperature and humidity.

**Advantages:**

- Extremely Fast Drying (60 min)
- High Gloss
- Non-Yellowing
- Single Component
- One Day Staining System Sealer
- Inexpensive
- Non-toxic / Non-corrosive
- Excellent Adhesion
- Easy to use

**Coverage:**

400 sq. ft / Gallon

MCU 12 coverage rates vary, these are approximations only. Actual coverage will vary depending on substrate conditions, surface porosity, ambient conditions and method of application.

**Surface Preparation**

MCU 12 can be applied over sealed or primed surfaces that are free of grease, oils, dirt and embedded contaminants. Sanding to at least a 180 grit is recommended. Remove dirt and dust. Two coats or a sealer (like MCU 825) prior to the topcoat may be required on some porous woods or other substrates.

**Mixing:**

None required for a high gloss, non-yellowing sealer. Tinting: Can mix 1-6 oz. of iCOAT's coloring systems to one gallon of MCU 12 to tint the sealer. Reapply lid and shake thoroughly for 30 seconds.

**Application:**

**Do not dilute.** Use a ¼" Mohair roller to apply at a coverage rate of 300-500 sq/ft per gallon. It can be brushed, roller or sprayed. For best results spraying should be done with an air assisted airless sprayer. On highly porous surfaces use MCU 825 as a primer to prevent outgassing and increase coverage rates.

**Drying Time:**

You may re-coat if needed as soon as the surface is dry to touch or in about 60 minutes. Light foot traffic may be permitted in 2 hours of MCU 12 being dry. All times are based on average temperature of 70 degrees and 50% humidity. Cooler temperatures and humidity will increase drying time.

**Limitations:**

- Keep container tightly closed
- Wash thoroughly after handling
- Protect from freezing
- Avoid eye, skin and clothing contact.

**Specialty Finishes**

**RECOMMENDED FOR USE WITH:** Paint and Coating Resins

MCU 12 is a NMP free, extremely hard, high gloss, APEO free, waterbased polyurethane dispersion; with exceptional chemical and stain resistance properties. Specifically designed for use in a formulated topcoat for wood, metal, concrete, flooring, and selected plastics.

**SPECIAL FEATURES:** NMP-Free (NF), Low VOC (<100 g/L)

**APPLICATION TYPES:** Interior, Exterior, Flooring, Wood, Concrete, Paint, Metal

**TYPICAL SPECIFICATIONS:** **TOTAL SOLIDS:** 32.0 - 34.0  
**PH:** 8.0 - 10.0  
**VISCOSITY @ 25 DEGREES C:** 10 - 500 cps  
**VOC (GRAMS/LITER):** 96.85  
**VOC (% OF TOTAL WEIGHT):** 9.82  
**SPECIFIC GRAVITY:** 1.02  
**APPEARANCE:** Semi-translucent  
**GLOSS @60°:** 80 - 100  
**FREEZE THAW CYCLES D2243:** 3  
**SHELF LIFE:** Maximum 12 months  
**HARMONIZE TARIFF NUMBER:** 3909.50.6000

**CHEMICAL RESISTANCE Testing (D-1308):**

*ote: 5= no damage, films dried for 15 minutes at 80°C, then equalized at room temp for 7 days*

**WATER:** 5  
**ACETIC ACID:** 5  
**METHYL ETHYL KETONE:** 4  
**2-PROPANOL:** 4  
**TOLUENE:** 5  
**GASOLINE:** 5

**TYPICAL FILM PROPERTIES:** **TENSILE (D-882):** 4840  
**TENSILE AT 100% ELONGATION:** N/A  
**ELONGATION (D-882):** 95%  
**COLD CRACK (ISO 17233):** below -20°C  
**SOFTENING POINT:** 160°C  
**PENCIL HARDNESS (D-3363):** HB  
**SWARD HARDNESS (D-2134):** 24.3  
**UV RESISTANCE (D-4587):** No Damage (1000 hours at 340 nm)  
**IMPACT RESISTANCE (D-2794):** No Damage at 160 psi Reverse, Damage at 160 psi Direct  
**TABOR ABRASION (D-4060):** 11 mg loss (CS-10, 1000g, 1000 cycles)  
**MANDREL BEND (D522):** Pass 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 1  
**DRY TIME (D-5895):** 89.3  
**HYDROLYSIS RESISTANCE (200 HOURS, 70°C, 95% RH):** Retained 90% of Tensile Properties

**Specialty Finishes**