

## Florothane MC Ultra 100 Aliphatic Moisture Cure Gloss Urethane

**Product Description:** Florothane MC is an economical, light stable, high gloss standard traffic system. It provides outstanding gloss retention and superior hardness as well as exceptional abrasion resistance. It is resistant to many chemicals and solvents and it stops concrete dusting, providing a floor that is easy to maintain.

**Typical Uses, Applications:** Ideally suited for commercial, industrial and institutional applications, such as:

- Aircraft hangars
- Auto & motorcycle dealerships
- Showrooms

**Product Advantages:**

- Resistant to Skydrol®, jet fuels and other vehicle maintenance fluids.
- Florothane MC is high solids, low odor.
- Aliphatic (non-ambering)
- A variety of colors can be achieved with the addition of Florock Universal Colorants.

**Packaging:**

- Florothane MC Ultra 100 Topcoat –  
• 4.5 Gal Kit

*Note: Catalyst is not for use with Florothane MC Ultra 100.*

Cured Physical Properties – MC Ultra 100		
Abrasion Resistance, Taber Abrader CS 17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	18.8 mg loss
Sward Hardness	ASTM D2240	40 – 50
Gloss, 60 Degree	ASTM E97	90+
Konig Hardness, 3 mil film		171.3
COF – James Friction Tester	ASTMD2047	0.60 – 0.65
Tensile Strength, PSI	ASTM 2370	9,500
Tensile Elongation, %	ASTMD2370	6
Dry Film Thickness, mil		2.9 per coat

**Storage:** All containers should be stored at 40° F to 95° F and be kept tightly sealed and out of direct sunlight.

**Coverage:**

- Florothane MC 100: 500 SF/gallon

**Surface Preparation:** New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the water drop test and that all surface defects have been repaired.

**Florothane MC Ultra 100** – One coat applied over primer.

*Note: Floropoxy should not be applied when floor temperature is above 90° F or below 55° F, or when within 5° F of the dew point.*

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**1. Primer Application:** Once surface preparation is complete, apply Floropoxy 4700 primer to the concrete floor. In a clean, dry container, blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix only the amount that can be applied during the working time. Mix thoroughly for 3-5 minutes using a low speed mechanical mixer. Pour onto floor and, using a 1/8" V notched squeegee, apply primer at a rate of 160 sf/gallon; back roll with a 3/8" nap roller immediately after spreading.

*Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.*

**2. Topcoat Application:** For a pigmented coating, add 2 quarts of Florock Universal colorant into the mixture of parts A & B. Mix parts A & B for 3 minutes using a Jiffy mixer blade with slow speed drill. Apply only one coat @ 500 sf per gallon with a 3/8" nap roller. It is important to take great care not to apply this coating above or below 500 sf per gallon. Excess material could result in blisters and insufficient material could result in an uneven appearance. Allow coating to cure for 24 hours. If skid resistant characteristics are required, broadcast #60 or #80 grit into the wet primer or topcoat at the rate of 4 to 8 lbs/1000 sf.

*Note: Florothane MC 100 is designed as a single topcoat system. If additional coats are to be put on, a sanding to degloss the coating must occur. Florothane MC 100 will not adhere to itself. Allow a minimum of 16 hours before sanding.*

Chemical Resistance – Clear MC Ultra 100		
Reagent	1 Day	7 Days
Hydrochloric Acid 10%	E	E
Hydrochloric Acid 30%	E	E
Nitric Acid 10%	G	F
Phosphoric Acid 50%	E	G
Sulfuric Acid 37%	E	G
Acetic Acid 10%	E	E
Citric Acid 10%	E	E
Oleic Acid	E	E
Ammonia Hydroxide 10%	E	E
Ethylene Glycol (Antifreeze)	E	E
Isopropyl Alcohol	G	G
Methanol	G	F
D-Limonene	E	E
JP-4 Jet Fuel	E	E
Gasoline	E	E
Mineral Spirit	E	E
Xylene	E	E
Methylene Chloride	P	P
MEK	F	F
PMA	E	G
Ammonium Nitrate 20%	E	E
Brake Fluid	E	E
Bleach	E	E
Motor Oil	E	E
Skydrol ® 500B	E	E
Skydrol ® LD4	E	E
Sodium Chloride 20%	E	E
Tide Laundry Soap 1%	E	E
Trisodium Phosphate 10%	E	E

System cured 2 weeks prior to testing. Testing results are 1 day and 7 day exposures with 2 hr. recovery.

E – Recommended for longer-term spills

G – Recommended for shorter-term spills

F – Recommended for intermittent spills which are cleaned up promptly.

P – Not Recommended

S - Stains

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### Instructions for Use over Existing Coatings:

1. Examine the existing coating to ensure that it is well bonded to the concrete. Any loose coating must be completely removed and edges should be sanded to a feathered edge.

2. Clean the entire floor thoroughly with detergent cleaner; the surface must be free of all dirt, oils, or other contaminants.

3. After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, and wipe with Florobase Thinner to ensure good adhesion of the new system. Any bare concrete should be mechanically prepared and primed with Floropoxy 4700.

**Maintenance:** Sweep away dust and debris with a broom. Clean on a regular basis with a surfactant type mild detergent. Florock floors never need to be waxed.

Liquid Physical Properties		
Property	Test Method	Ultra 100 R0-158/R0-159
Viscosity, A+B	ASTM D2196	450 cps
Flash Point, °F	ASTM D3278	185/185
Wt. Per Gal. A+B	ASTM D1475	9.2 lbs
N.V.W., A+B	ASTM D2369	Clear 91%
N.V.W., A+B	ASTM D2369	Colored 90.2%
VOC, lbs/gal	ASTM D3960	0.83
VOC, grams/ltr	ASTM D3960	45 gpl
Blended Components		
Recommended Spread Rate	500sf/gal	
Dry Film Thickness per Coat	2.9 mils	
Floor and Air Temp. Limits*	55° F- 90° F	
Set to Touch, 70° F *	8 - 12 hrs.	

## **Florothane MC Ultra 100** Aliphatic Moisture Cure Gloss Urethane

**Please read material safety data before using product.**

**DISCLAIMER:**

All preceding statements and recommendations are based on experience we believe to be reliable. The end use or application of these products being beyond the control expressed or implied, as to results or hazard from its use. The suitable risk and liability of a product for unintended use shall be solely up to the user.