



## TECHNICAL DATA SHEET

# UR4800 HIGH SOLIDS URETHANE TOPCOAT

### PRODUCT DESCRIPTION

UR4800 IS A CLEAR TWO COMPONENT URETHANE TOPCOAT WITH HIGH GLOSS, EXCELLENT UV STABILITY AND OUTSTANDING CHEMICAL AND ABRASION RESISTANCE.

### TYPICAL USES/APPLICATIONS

- OPTIONAL SECONDARY TOPCOAT OVER FULL BROADCAST FLOOR
- TOPCOAT FOR SMOOTH EPOXY FLOORS
- DIRECT TO CONCRETE

### PRODUCT ADVANTAGES

- FAST RETURN TO SERVICE
- SIMPLE MIX RATIO
- EASY ROLLER APPLICATION
- EXTENDED POTLIFE
- EXTENDED WORKING TIME

### PACKAGING

4-GALLON KIT  
PART A: 3-GALLON PAIL  
PART B: 1-GALLON PAIL

### STORAGE

PRODUCT SHOULD BE STORED INDOORS BETWEEN 60°F TO 85°F AWAY FROM DIRECT SUNLIGHT AND MOISTURE.

MAKE SURE CONTAINERS ARE COMPLETELY SEALED TO PREVENT MOISTURE CONTAMINATION AND ENSURE BEST PERFORMANCE.

SHELF LIFE IS 12 MONTHS.

### RECOMMENDED APPLICATION TEMPERATURE

FLOOR TEMPERATURE: 65° - 85° F

APPLYING MATERIAL OUTSIDE OF THE RECOMMENDED TEMPERATURE RANGE MAY DRAMATICALLY INCREASE OR DECREASE CURE SPEED.

### COVERAGE

401 - 535 SQ.FT./GAL. (3 - 4 MILS)

### TEST DATA

#### SOLIDS CONTENT (ASTM 2369):

88.1%

#### VOC (ASTM 2369):

133 G/L

#### WEIGHT PER GALLON (ASTM D1475):

PART A: 9.66 LB/GAL

PART B: 8.32 LB/GAL

#### VISCOSITY (ASTM D7867):

PART A: 1650 CPS

PART B: 10 CPS

#### TACK FREE TIME (ASTM D1640):

4 MILS, 50% RH

4.5 HRS

#### ADHESION TO CONCRETE (ASTM D4541):

>500 PSI (CONCRETE FAILED)

#### KÖNIG HARDNESS 30° (ASTM D4366):

FULL HARDNESS: 136 S

#### TABER ABRASION (ASTM D4060):

CS-17 WHEELS, 1000G LOAD

LOSS/1000 CYCLES: 27 MG

#### GLOSS (ASTM D523):

WITHOUT ANTI-SLIP ADDITIVE

20°: 85 UNITS

60°: 97 UNITS

#### UV RESISTANCE (ASTM G154):

340 NM BULB, .89 IRRADIANCE, 1000 HOURS, 60 °C

ΔE: <5

#### TENSILE STRENGTH AND ELONGATION (ASTM D638):

4 MILS

TENSILE STRENGTH: 5020 PSI

ELONGATION: 28%

#### WATER VAPOR TRANSMISSION (ASTM E96/E96M):

4 MILS

PERMEABILITY: 1.8 PERMS

ALL TEST DATA COLLECTED AT 70°F.



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### SURFACE PREPARATION

PRODUCT IS INTENDED FOR USE AS A TOPCOAT OVER A PREVIOUSLY PRIMED/COATED SURFACE OR AS A DIRECT TO CONCRETE APPLICATION.

SURFACE MUST BE FREE OF DIRT, GREASE, OIL, AND OTHER CONTAMINANTS. CONTAMINANTS COULD LEAD TO SURFACE DEFECTS AND/OR POOR ADHESION. MAKE SURE SURFACE IS PROPERLY PREPARED BEFORE APPLICATION.

ENSURE THAT THE FLOOR TEMPERATURE IS MORE THAN 5 DEGREES OVER THE LOCAL DEW POINT TO AVOID WATER CONDENSATION.

#### FOR BARE CONCRETE

FLOOR MOISTURE SHOULD BE MEASURED WITH A NONDESTRUCTIVE ELECTRONIC MOISTURE METER AS PER ASTM F2659. READING SHOULD BE LOWER THAN 5.0% BY THIS METHOD. GRIND SURFACE OF THE CONCRETE WITH A DIAMOND GRINDER.

#### FOR OVER ANOTHER COATING

IF APPLYING UR4800 PAST 24 HOURS OF THE PREVIOUS COATING'S APPLICATION, FULLY ABRADE THE SURFACE TO UNIFORM APPEARANCE, REMOVING ALL GLOSS. FAILURE TO DO SO COULD RESULT IN POOR ADHESION.

#### FOR RECOATING UR4800

IF APPLYING UR4800 IN MULTIPLE LAYERS, ONLY RECOAT WHILE THE PREVIOUS LAYER IS STILL TACKY TO PREVENT ADHESION FAILURE. OTHERWISE, WAIT UNTIL COATING IS HARD ENOUGH TO SAND AND THEN FULLY ABRADE TO UNIFORM DULLNESS AS STATED IN PREVIOUS SECTION.

### PRE-MIX REQUIREMENTS

PART A: NOT REQUIRED.

PART B: LIGHTLY SHAKE CONTAINER PRIOR TO USE.

### MIX RATIO

3:1 MIX RATIO BY VOLUME (A:B)

### MIX INSTRUCTIONS

CAREFULLY MEASURE 3 PARTS A AND 1 PART B BY VOLUME AND BLEND TOGETHER FOR 2 MINUTES WITH A DRILL MIXER. PROCEED TO APPLICATION IMMEDIATELY AFTER MIXING. NEVER MIX MORE MATERIAL THAN CAN BE INSTALLED WITHIN 30 MINUTES.

### APPLICATION

1. FOR INCREASED SLIP RESISTANCE, ANTI-SLIP ADDITIVES CAN BE USED DURING INSTALLATION (SHARKBITE®, ETC.). THE ADDITION OF ANTI-SLIP ADDITIVES MAY REDUCE GLOSS.
2. TO EXTEND THE WORKING TIME, LEAVE THE MATERIAL IN THE MIXING CONTAINER UNTIL READY TO APPLY. MIX ONLY THE AMOUNT OF MATERIAL THAT CAN BE INSTALLED WITHIN 30 MINUTES.
3. USING THE APPROPRIATE COVERAGE RATE, SPREAD MATERIAL EVENLY WITH A PRE-WETTED ROLLER. USE A CHIP BRUSH TO APPLY AROUND THE EDGES OF THE FLOOR. 3/8" NAP SHED RESISTANT 18" ROLLER AND 3-4" CHIP BRUSH ARE RECOMMENDED.
4. WORK TIME OF THE COATING IS REDUCED UNDER HIGH TEMPERATURE AND/OR HUMID CONDITIONS.
5. FOR DETAILED APPLICATION INSTRUCTIONS, REFER TO PENNTEK TRAINING MANUAL OR CONTACT THE TECHNICAL SUPPORT LINE.

### PRODUCT AND APPLICATION SUPPORT

REFER TO THE PENNTEK TRAINING MANUAL OR CONTACT TECHNICAL SUPPORT LINE (952-491-0616) FOR FURTHER INFORMATION.



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### CHEMICAL RESISTANCE | 24 HOUR AND 30 MINUTE SPOT TESTING

CHEMICAL	24 HR RESULT	30 MIN RESULT
ACETIC ACID 30%	1.5	4
ACETIC ACID 5%	4	
ACETONE	1.5	4.5
AMMONIA 10%	5	
BATTERY ACID (SULFURIC ACID 37-40%)	3*	5
BRAKE FLUID	5	
CITRIC ACID 20%	5	
CLEANER (FORMULA 409®)	4.5	
CLEANER (PINE-SOL®)	5	
COFFEE	5	
COLA	5	
DISH SOAP (DAWN®)	4	5
DISH SOAP 1% (DAWN®)	5	
ETHYLENE GLYCOL / ANTIFREEZE	5	
GASOLINE	4	
GLASS CLEANER (WINDEX®)	4	5
GLYCERIN	5	
HAND SANITIZER (ETHANOL BASED)	3.5	5
HOUSEHOLD BLEACH	4	5
HOUSEHOLD BLEACH 10%	4	
HYDROCHLORIC ACID 20%	1	4
HYDROCHLORIC ACID 10%	4	
ICE MELT 20% IN WATER	5	
IODINE SOLUTION (BETADINE®)	4*	5
ISOPROPYL ALCOHOL 99%	2	5
KETCHUP	4	5
MINERAL SPIRITS	5	
MOTOR OIL (CONVENTIONAL)	5	
MOTOR OIL (SYNTHETIC)	5	
MUSTARD	4	5
PHOSPHORIC ACID 75%	2	4
PHOSPHORIC ACID 50%	2.5	
PHOSPHORIC ACID 10%	4	
SKYDROL® LD-4	5	
SODIUM HYDROXIDE 50%	5	
SUGAR SOLUTION 20%	5	
WATER	5	
WINDSHIELD WASHER FLUID	4	5
XYLENE	5	

**KEY:**

1 = MODERATE/SEVERE DAMAGE, DOES NOT RECOVER  
 2 = MILD DAMAGE, DOES NOT RECOVER  
 3 = LIGHT DAMAGE, PARTIALLY RECOVERS

4 = LIGHT DAMAGE, FULLY RECOVERS  
 5 = NO DAMAGE  
 \* = STAINING