



## PRODUCT INFORMATION

### PRODUCT DESCRIPTION

DYNA-PRIME N-23 Water Chasing® Primer is a two-component penetrating 100% solids, zero VOC polymeric primer that has been formulated as a high performance damp concrete primer. DYNA-PRIME N-23 penetrates and seals with little bubbling to allow ease of topcoat application.

### PRODUCT CHARACTERISTICS

<b>Finish:</b>	Glossy
<b>Color:</b>	Natural or Gray, as supplied
<b>Solids by Weight:</b>	100%
<b>VOC (calculated):</b>	0
<b>Mix Ratio:</b>	1 : 1

#### Theoretical Coverage Rate:

(coverage may vary depending on the porosity of the surface being coated)

<u>Normal Concrete Porosity:</u>	Minimum	Maximum
Wet mils (microns)	5.0 (127)	8.0 (203)
Dry mils (microns)	5.0 (127)	8.0 (203)
~Coverage sq ft/gal (m2/L)	320 (7.9)	200 (4.9)
<u>High Concrete Porosity:</u>		
Wet mils (microns)	8.0 (203)	12.0 (305)
Dry mils (microns)	8.0 (203)	12.0 (305)
~Coverage sq ft/gal (m2/L)	200 (4.9)	133 (3.3)

**Theoretical yield sq ft/gal**      **1600 (39.3)**  
(m2/L) @ 1 mil / 25 microns dft

#### Curing Properties:

dependent upon temperature & humidity

<b>Working Time:</b>	45 minutes @ 77°F (25°C)
<b>Dry to Touch:</b>	4 hours @ 77°F (25°C)
<b>Dry/Cure to Recoat Time:*</b>	2 – 24 hours * @ 77°F (25°C)
<b>To recoat with:</b>	
Non-Exothermic Materials	2 hours @ 77°F (25°C)
Low Exothermic Materials	2-3 hours @ 77°F (25°C)
High Exothermic Materials	4-5 hours @ 77°F (25°C)
2K Reactive Mat'ls- Cold Spray	3-4 hours @ 77°F (25°C)
2K Reactive Mat'ls- Hot Spray	6-7 hours @ 77°F (25°C)
	* Times vary, depending upon material being used for next coat: For non-exothermic materials, times are shorter / For exothermic materials, times are longer.
<b>Return to Service:</b>	4 – 24 hours (dependent upon use)
<b>Pot-Life:</b>	45 – 120 minutes
<b>Shelf Life:</b>	12 months from shipping date (unopened @ 22°C)
<b>Flash Point:</b>	A - >230°F (110°C) (Closed Cup) B - >400°F (>204°C) (Closed Cup)
<b>Viscosity :</b>	A – 80 @ 77°F (25°C), B – 530 @ 77°F (25°C)

### RECOMMENDED USES (Examples listed)

For High Hydrostatic Applications

- Basins & Reservoirs
- Cold Storage Areas
- Concrete Decks
- Concrete Restoration
- Control Joints
- Equipment Wash-Down Areas
- Fish Hatcheries
- Fish Ponds
- Foundation Coatings
- Garage Floor Coatings
- Highway Construction (overpasses/metal culverts)
- Laboratory Floors
- Landscape Ponds
- Man-Hole & Sewer Linings
- Man-Hole Protective Coatings
- Man-Hole Restoration
- Parking Structure Coatings
- Pool Deck Coating
- Traffic Bearing Waterproofing
- Tunnels
- Waterpark Features & Repairs
- Waterparks & Theme Parks
- Water Treatment Facilities

### PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results
<b>Adhesion</b>	DelFesko PosiTest AT-CM Concrete - unprimed	450 psi Substrate Failure
<b>Polyurea Top Coat Adhesion</b>	Elcometer	>500 psi
<b>Elongation</b>	ASTM D412	45 %
<b>Tensile Strength</b>	ASTM D638	2400 psi
<b>Tear Strength</b>	ASTM D624	200 pli

All physical property reporting is subject to verification by third party laboratory.

### PRODUCT FEATURES

- EXHIBITS LOW SENSITIVITY TO SUBSTRATE MOISTURE
- PENETRATES AND SEALS WITH EXCELLENT ADHESION
- STABLE AT LOW TEMPERATURES
- LONG WORKING TIME FOR EASE OF APPLICATION
- CREATES IMPERMEABLE VAPOR BARRIER THROUGH A PENETRATING POLYMER NETWORK INSIDE POROUS SUBSTRATES



## PRODUCT INFORMATION

### RECOMMENDED SYSTEMS

	Dry Film Thickness / ct.	
	Mils	(Microns)
<b>Concrete (Atmospheric Exposure):</b>		
DYNA-PRIME N-23	5 – 8	(127 – 203)
DYNA-PUR 7416	6 – 15	(152 – 381)
DYNA-PRIME N-23	5 – 8	(127 – 203)
DYNA-PUR 7416	6 – 15	(152 – 381)
DYNA-PUR 9086	8 – 12	(203 – 304)
DYNA-PRIME N-23	5 – 8	(127 – 203)
DYNA-PUR 136/185	20 – 100	(508 – 2540)
DYNA-PRIME N-23	5 – 8	(127 – 203)
DYNA-PUR 1120/1137	20 – 100	(508 – 2540)
DYNA-PUR 8817	10 – 20	(254 – 508)
<b>Concrete (Interior Floor):</b>		
DYNA-PRIME N-23	5 – 8	(127 – 203)
DYNA-PUR 7416	6 – 15	(152 – 381)
DYNA-PRIME N-23	5 – 8	(127 – 203)
DYNA-PUR 1120/1137	20 – 80	(508 – 2032)
<b>Concrete (Containment):</b>		
DYNA-PRIME N-23	5 – 12	(127 – 305)
DYNA-PUR 9046	10 – 60	(254 – 1524)
DYNA-PUR 9051	10 – 30	(254 – 762)
DYNA-PRIME N-23	5 – 12	(127 – 305)
DYNA-PUR 1137	30 – 100	(762 – 2540)
DYNA-PUR 9051	10 – 30	(254 – 762)
DYNA-PRIME N-23	5 – 12	(127 – 305)
DYNA-PUR 1120	20 – 60	(508 – 1524)
DYNA-PUR 185	30 – 100	(762 – 2540)
<b>Concrete (Below Grade):</b>		
DYNA-PRIME N-23	8 – 12	(203 – 305)
DYNA-PUR 1137/1120	40 – 100	(1016 – 2540)

### WARRANTY

**LIMITED WARRANTY:** This product is warranted to be of good quality when used according to the manufacturer's directions. It is not warranted for any other use or purpose. If proved to be defective, liability is limited to replacement of defective material, or refund of the purchase price of the material, at the option of Creative Material Technologies, Ltd. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturer's or its dealer's responsibility. There are no other warranties, either expressed or implied. Creative Material Technologies, Ltd. will not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of this product.

### DISCLAIMER

While every attempt has been made to supply information as accurately as possible, CMT does not guarantee the accuracy of this information nor the suitability of this product for any purpose.

### SURFACE PREPARATION

The surface must be clean but not dry to achieve proper adhesion. It is recommended that Applicator wets the surface of the concrete to assure uniform moisture content of the concrete. All standing water must be removed (i.e., vacuumed) prior to application. All cracks, joints, and seams should be filled with a polyurea, high elastomer material after priming. HydraLok SLR-2, by CMT, or similar product is recommended. Avoid acrylic caulks or any compound with silicone. If applicable, the concrete substrate should be prepped by degreasing with a degreaser, then mechanically abraded to achieve a 3-5 mil anchor profile.

Minimum recommended surface preparation:

Atmospheric:	SSPC-SP10/NACE 2, 3 mil (75 micron) profile
Immersion:	SSPC-SP10/NACE 2, 3 mil
Concrete & Masonry:	SSPC-SP13/NACE 6 or ICRI No. 310.2, CSP 3-5.

### TINTING

Do not add any colorant to product.

### APPLICATION CONDITIONS

Substrate: 36°F (2°C) *minimum*, 95°F (35°C) *maximum*

### ORDERING INFORMATION

#### Packaging:

Drums:	Drum Sets (104 gal)	52 gal A, 52 gal B
Pails:	Pail Sets (10 gal)	5 gal A, 5 gal B
Gallon Kits:	Gallon Sets (2 gal)	1 gal A, 1 gal B
Quart Kit:	Quart Sets (2 qt)	1 qt A, 1 qt B

### SAFETY PRECAUTIONS

**WARNING!** Skin and eye irritant. May cause skin sensitization. **FIRST AID:** Eyes – Flush with water for 15 minutes and call physician. Skin – Wash thoroughly with soap and water. Ingestion – Do not induce vomiting. Call Physician immediately. Use in well ventilated area. **KEEP OUT OF REACH OF CHILDREN.** Refer to the MSDS sheet before use.



## APPLICATION BULLETIN

### SURFACE PREPARATIONS

Make sure that substrate has been prepared according to manufacturer's specifications for that particular substrate. The surface must be clean but not dry to achieve proper adhesion. It is recommended that Applicator wets the surface of the concrete to assure uniform moisture content of the concrete. All standing water must be removed (i.e., vacuumed) prior to application. All cracks, joints, and seams should be filled with a polyurea, high elastomer material after priming. HydraLok SLR-2, by CMT, or similar product is recommended. Avoid acrylic caulks or any compound with silicone. If applicable, the floor should be prepped by degreasing with a degreaser, then mechanically abraded to achieve a 3-5 mil (76-127 microns) anchor profile.

#### Concrete:

New concrete should be allowed to cure for a minimum of 30 days at 70°F. Substrate should be free of loose materials, efflorescence, dust, dirt, mold, mildew, grease, and all other foreign materials. Pressure washing and/or acid etching is recommended. Substrate should have no standing water but should be uniformly wet. It is recommended that Applicator wets the surface of the concrete to assure uniform moisture content of the concrete. All standing water must be removed (i.e., vacuumed) prior to application. If applicable, the concrete substrate should be prepped by degreasing with a degreaser, then mechanically abraded to achieve a 3-5 mil anchor profile. The recommended concrete application method of this product involves pouring it in a narrow line directly onto the concrete surface, then spreading it with a squeegee. Spread the coating in a continuous manner from one side of the area being coated to the other. Immediately follow with a nap shed resistant roller.

#### Wood:

For wood applications, apply DYNA-PRIME N-23 with a roller or brush, making sure that substrate is thoroughly absorbing DYNA-PRIME N-23. Note: If DYNA-PRIME N-23 is not penetrating the substrate, surface preparation is not complete.

#### Follow the standard methods listed below when applicable:

ASTM D4258 Standard Practice for Cleaning Concrete.  
ASTM D4259 Standard Practice for Abrading Concrete.  
ASTM D4260 Standard Practice for Etching Concrete.  
ASTM F-1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.  
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.  
ICRI No. 310.2 Concrete Surface Preparation.

### APPLICATION CONDITIONS

Substrate: 36°F (2°C) *minimum*, 95°F (35°C) *maximum*

### APPLICATION EQUIPMENT

- Use 1/4" to 3/8" high quality non-linting rollers for application.
- Good quality roller frames are suggested.
- Paint tray with disposable paint tray liners.
- Measuring and mixing containers.
- Stirring equipment and stirring sticks.

### NOTES

DYNA-PRIME N-23 Water Chasing® Primer is a material that continues to crosslink during its curing cycle. Applying heated and/or exothermic materials onto the primed substrate, where the N-23 has not yet crosslinked enough to prevent moisture migration through the partially crosslinked primer may result in moisture penetrating to the surface and reacting with any moisture reactive materials being applied, since hydro-thermal migration conditions are created. Therefore the greater the change in temperature between the substrate temperature and the highest exothermic temperature, the longer one must wait before applying the heated exothermic material.

If the expected wait times to recoat do not meet the application requirements of the job, contact manufacturer for complementary products that will crosslink faster.



## APPLICATION BULLETIN

### APPLICATION PROCEDURES

**Mixing Instructions:** The product should be at room temperature prior to mixing, to achieve proper flow and wetting. Avoid mixing and application of this product if the substrate temperature is below 50°F or above 95°F. The moisture content of the substrate should be higher than the moisture content of the air. Thoroughly mix the A SIDE and B SIDE in the 1/1 mix ratio. Blend thoroughly for approximately 2 minutes with a "Jiffy Mixer", "Squirrel Mixer", or "Rabbit Mixer" attached to a low-speed (400-600 RPM) electric drill. DO NOT use a paddle mixer or any mixers that will entrap air when mixing. This product is designed to be applied thin.

**Application Instructions:** The recommended concrete application method of this product onto a horizontal substrate involves pouring it in a narrow line directly onto the concrete surface, then spreading it with a squeegee. Spread the coating in a continuous manner from one side of the area being coated to the other. Immediately follow with a nap shed resistant roller. Antislip materials and decorative materials can be used with DYNA-PRIME N-23 Primer. Evenly broadcast these materials over the still wet surface. A compatible top coat is recommended after the DYNA-PRIME N-23 Primer has reached a tack free or dry to touch condition. Application equipment should be cleaned using acetone.

#### Theoretical Coverage Rate:

(coverage may vary depending on the porosity of the surface being coated)

<u>Normal Concrete Porosity:</u>	Minimum	Maximum
Wet mils (microns)	5.0 (127)	8.0 (203)
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Theoretical yield sq ft/gal 1600 (39.3)  
(m2/L) @ 1 mil / 25 microns dft

#### Curing Properties:

dependent upon temperature & humidity

**Working Time:** 45 minutes @ 77°F (25°C)

**Dry to Touch:** 4 hours @ 77°F (25°C)

**Dry/Cure to Recoat Time:\*** 2 – 24 hours \* @ 77°F (25°C)

To recoat with:

Non-Exothermic Materials	2 hours @ 77°F (25°C)
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\* Times vary, depending upon material being used for next coat: For non-exothermic materials, times are shorter / For exothermic materials, times are longer.

**Return to Service:** 4 – 24 hours (dependent upon use)

**Pot-Life:** 45 – 120 minutes

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### PERFORMANCE TIPS

For concrete, always perform Calcium Chloride test as per ASTM F1869.

\*\*Where primers are used, do not fill the profile on concrete with excess primer. Allow the primer to become "tack-free" before coating – usually 2 hours @ 70°F (21°C); longer for colder temperatures. Surface should not be allowed to get wet between primer coat and base coat. The surface is "tack-free" when the primer does not transfer onto your gloves when you press down on it.

For immersion applications, a minimum wet film thickness of 10-12 mils (254-305 microns), depending on substrate porosity and topcoat, is required as part of the immersion coating system. See manufacturer's recommendation for topcoat.

For Immersion Service: (if required) Holiday test in accordance with ASTM D4787 for concrete.

For concrete, all cracks must receive a 6" wide by 30 mil (762 micron) dft bridge coat after cracks have been properly primed with DYNA-PRIME N-23, and filled.

### CHEMICAL RESISTANCE

Immersion at 25°C for 7 days unless otherwise indicated

Water (at 25 °C) E

G= Good, E = Excellent

### CLEAN UP INSTRUCTIONS

Cured product may be disposed of without restriction. Clean A Side with acetone. Clean B Side with warm, soapy water. Mixed, uncured product may be cleaned up with acetone. Follow manufacturer's instructions when using acetone. Cured product cannot be removed off of substrate without use of mechanical equipment. Uncured product must be disposed of according to local, state, and federal laws.

### SAFETY PRECAUTIONS

**WARNING!** Skin and eye irritant. May cause skin sensitization. **FIRST AID:** Eyes – Flush with water for 15 minutes and call physician. Skin – Wash thoroughly with soap and water. Ingestion – Do not induce vomiting. Call Physician immediately. Use in well ventilated area. **KEEP OUT OF REACH OF CHILDREN.** Refer to the MSDS sheet before use.

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