DIRECT EPOXY SUPPLY

# Poly 98 Medium

## Medium Cure Aliphatic Polyaspartic

### DESCRIPTION

Poly 98 Medium is a two-component, 100% solids, V.O.C. compliant, aliphatic polyaspartic developed for UV stable floor topcoats. It provides outstanding appearance, superior chemical, UV, and solvent resistance. It exhibits excellent physical properties. This system complies with the Canadian Food Inspection Agency (C.F.I.A.).

### ADVANTAGES

- UV-stable top coat
- Superior chemical resistance
- Superior weather and abrasion resistance
- Non yellowing and good gloss retention
- Easy to mix 1:1 ratio by volume
- Emits virtually no odors and can be applied indoors
- Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good
- bond to the substrate
- V.O.C. compliant in all 50 states and Canada

### PRIMARY APPLICATIONS

- Marine protection for fiberglass, steel, concrete or wood
- Aircraft hangar floors
- Low temperature equipment
- Maintenance facilities
- Offshore platforms
- Industrial shop floors
- Car washes or wash bays
- Secondary Containment
- Cooling towers
- Bridges
- Wastewater treatment applications

### TECHNICAL DATA

| | |
|---|---|
| **Packaging** | 7.57 L (2 US gal.) and 37.8 L (10 US gal.) |
| **Color** | Upon Request |
| **Recommended Thickness** | Primer: DE-100 or Poly 98- 5-10 mils D.F.T. (350-150 ft²/gal)<br>Finish Coat: Poly 98- 6-10 mils D.F.T. (350-150 ft²/gal) |
| **Mix Ratio (by volume)** | A : B = 1 : 1 (100 : 100) |
| **Mix Ratio (by weight)** | A : B = 100 : 107 |
| **Pot Life (454 g)** | 40 - 50 minutes @ 25°C |
| **Working Time (25°C / 40% R.H.)** | 20 - 30 minutes |
| **Tack Free Time (8 mils) (23˚C/12% RH)** | 3 - 5 Hours |
| **Solids Content** | 98.5% by weight and volume |
| **Thinner Recommended** | Xylene |
| **Shelf Life** | 12 months (unopened, away from extremes) |
| **Specific Gravity** | Part A: 1.04 - 1.06<br>Part B: 1.13 - 1.14<br>Mix: 1.05 - 1.10 |

### Physical Properties @ 23°C (73°F), 50% R.H.

| | |
|---|---|
| **Abrasion Resistance, ASTM D4060, Taber Abrader CS-17 Wheel / 1000g (2.2 lbs.) / 1000 cycles** | 30 mg loss |
| **Adhesion, ASTM D4541 Concrete-primer** | >500 psi (substrate ruptures) |
| **Water Absorption, ASTM D570** | 0.2% |
| **Water Vapor Transmission, ASTM E96 Water Procedure B Film 0.01cm (0.004”)** | 1 perm |
| **Hardness (Shore D), ASTM D2240** | 75 - 78 |
| **Flexibility, 1/8” Mandrel, ASTM D1737** | Pass |
| **Falling Sand Abrasion Resistance (L sand/ 1 dry mil), ASTM D968** | 45 |
| **Viscosity @ 25°C (cP)** | Part A: 400 - 500<br>Part B: 150-180<br>Mix: 300 - 400 |

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## Physical Properties @ 23°C (73°F), 50% R.H.

| | |
|---|---|
| **Gloss, ASTM D523** | 95+ |
| **Fire Rating (CAN/ULC S102 / ASTM E84)** | Flame Spread: 5;<br>Smoke Developed: 94 (Class A) |
| **Coefficient of Friction ASTM D1894** | 0.5 - 0.7 |
| **Tensile Strength, ASTM D638** | 7000-8000 psi |
| **Compressive Strength (psi MPa), ASTM D695** | 9000 - 10000 |
| ***W/Quartz** | 13700 |
| ***W/Chips** | 12200 |
| **Elongation at Break, ASTM D638** | 100 - 110% |
| **Tear Strength (PLI), ASTM D2240** | 350 |
| **VOC (g/L)** | 0 |

## Curing Details

| **Temperature** | **Foot Traffic** | **Light Traffic** | **Full Cure** |
|---|---|---|---|
| 10°C (50°F) | 2 days | 5 days | 8 days |
| 20˚C (68°F) | 5 hours | 8 hours | 5 days |
| 30°C (86°F) | 3 hours | 6 hours | 3 days |

| **Recoat Window** | **Minimum** | **Max** |
|---|---|---|
| 10°C (50°F) | 20 hours | 36 hours |
| 20˚C (68°F) | 5 hours | 8 hours |
| 30°C (86°F) | 3 hours | 6 hours |

## SURFACE PREPARATION

Old Concrete

Concrete surface must be cleaned and mechanically prepared using shotblasting, sand blasting, and/ or diamond grinding. All oils, sealers, curing agents, waxes and fats must be removed prior to product application. Do not apply onto wet substrates. Chloride, moisture, and pH levels should be checked prior to application. Strongly recommended to use primer (DE-100) prior to application of DE-300-8084. All cracks and substrate imperfections should be filled and repaired prior to application.

New Concrete

New concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 MPa (3625 lbs./inch2) after 28 days and traction resistance must be at least 1,5 MPa (218 lbs./inch2). Shotblasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. DE-100 primer is recommended to be used to seal porous concrete surfaces prior to application. All cracks and substrate imperfections should be filled and repaired prior to application.

## MIXING

Materials should be pre-conditioned to a minimum of 15°C (50°F) prior to use. Thoroughly mix each component separately using paddle mixers and a drill for a minimum of 2 minutes to place the solids content evenly in suspension. Pour component B into component A using the proper mixing ratio of 1A:1B by volume. Mix both components for at least 3 minutes using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

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### APPLICATION

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

### CLEANING

Clean all application equipment with a specified cleaner. Once the material hardens it can only be removed mechanically. If the product splatters, wash thoroughly with hot soapy water.

### OVERLAPS

Clean all application equipment with a specified cleaner. Once the material hardens it can only be removed mechanically. If the product splatters, wash thoroughly with hot soapy water.

### SUGGESTIONS

Sprinkle the primed area lightly with aggregate to provide better footing.

### RESTRICTIONS

- Minimum/Maximum temperature of substrate: 15°C / 30°C (59°F / 86°F).
- Maximum relative humidity during application and curing: 85%.
- Humidity content of substrate must be < 4% when coating is applied.
- Do not apply on porous surfaces where a transfer of humidity may occur during application.
- Protect from humidity, condensation and contact with water during the 24-hour initial curing period.

### HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult a physician. For respiratory irritations, move affected person outdoors to fresh air. Remove contaminated clothes and wash before reuse. Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke irritation. Avoid eye contact. Contact with product may cause severe burns. Avoid breathing vapors released from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Always work in a properly ventilated area.

***Consult the material safety data sheet for further information.***

### IMPORTANT NOTICE

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of DIRECT EPOXY. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. DIRECT EPOXY. assumes no legal responsibility for use upon these data. DIRECT EPOXY. assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.