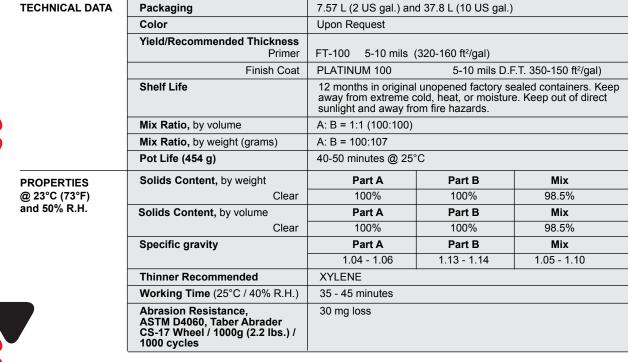


# Systems data sheet



#### **Aliphatic Polyaspartic**

| DESCRIPTION             | PLATINUM 100 is a two-component, 100% solids, V.O.C. compliant, long working time aliphati polyaspartic, developed for UV stable floor topcoats. It can be mixed with various colors or metallic powde to deliver opaque and glossy floor finishes. It provides outstanding appearance, superior chemical, UV and solvent resistance. It exhibits excellent physical properties. This system complies with the Canadia Food Inspection Agency (C.F.I.A.).                                                                                                |  |  |  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| PRIMARY<br>APPLICATIONS | <ul> <li>Marine protection for fiberglass, s</li> <li>UV-stable top coat</li> <li>Aircraft hangar floors</li> <li>Low temperature equipment</li> <li>Maintenance facilities</li> <li>Offshore platforms</li> <li>Industrial shop floors</li> <li>Car washes or wash bays</li> <li>Secondary Containment</li> <li>Cooling towers</li> <li>Bridges</li> <li>Wastewater treatment application</li> </ul>                                                                                                                                                    |  |  |  |
| ADVANTAGES              | <ul> <li>Long pot life (90 min to 100 min)</li> <li>Displays fast cure times with excellent adhesion</li> <li>Superior chemical resistance</li> <li>Superior weather and abrasion resistance</li> <li>Non yellowing and good gloss retention</li> <li>Easy to mix 1:1 ratio by volume</li> <li>Emits virtually no odors and can be applied indoors</li> <li>Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate</li> <li>V.O.C. compliant in all 50 states and Canada</li> </ul> |  |  |  |
|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |

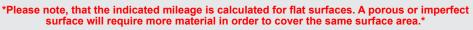






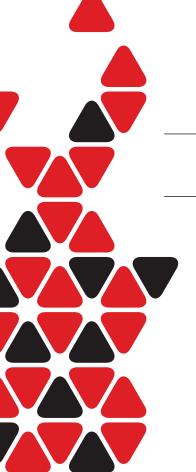
#### **Aliphatic Polyaspartic**

|  | Adhesion, ASTM D4541<br>Concrete-primer                                                                                                                              |                   |            | >500 psi (substrate ruptures) |                 |            |             |  |  |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|-------------------------------|-----------------|------------|-------------|--|--|
|  | Water Absorption, ASTM D570                                                                                                                                          |                   |            | 0.2%                          |                 |            |             |  |  |
|  | Water Vapor Transmission,<br>ASTM E96                                                                                                                                |                   |            |                               |                 |            |             |  |  |
|  | Water Procedure B<br>Film 0.01cm (0.004")                                                                                                                            |                   |            | 1 perm                        |                 |            |             |  |  |
|  | Hardness (Shore D), ASTM D2240                                                                                                                                       |                   |            | 75-78                         |                 |            |             |  |  |
|  | Flexibility, 1/8" Mandrel,<br>ASTM D1737<br>Falling Sand Abrasion Resistance<br>(L sand/ 1 dry mil), ASTM D968                                                       |                   |            | Pass                          |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | 45                            |                 |            |             |  |  |
|  | Viscosity @ 25°C                                                                                                                                                     |                   |            | Part A                        | Pa              | art B      | A/B Mix     |  |  |
|  |                                                                                                                                                                      |                   |            | 400-500                       | 500             | 0-600      | 300-400     |  |  |
|  |                                                                                                                                                                      |                   |            | Substrate Temp                | o N             | linimum    | Maximum     |  |  |
|  | Recoat                                                                                                                                                               |                   |            | ± 10 °C                       | 6               | 6-10 hours | 2 days      |  |  |
|  |                                                                                                                                                                      |                   |            | ± 20 °C                       | 6               | 6 hours    | 12 hours    |  |  |
|  |                                                                                                                                                                      |                   |            | ± 30 °C                       | ± 30 °C 4 hours |            | 8 hours     |  |  |
|  | Curing Details                                                                                                                                                       | Substrate Temp    | )          | Foot Traffic                  | Lig             | ht Traffic | Full Cure   |  |  |
|  |                                                                                                                                                                      | ±10 °C<br>± 20 °C |            | 1 days                        | 24-48 hours     |            | s 2-5 days  |  |  |
|  |                                                                                                                                                                      |                   |            | 4-6 hours                     |                 | 24 hours   | 24-48 hours |  |  |
|  |                                                                                                                                                                      |                   |            |                               |                 |            |             |  |  |
|  | Gloss, ASTM D523  Fire Rating CAN/ULC S102  Flame spread Smoke developed  Tensile Strength, ASTM D638  Compressive Strength (psi MPa), ASTM D695  *W/Quartz *W/Chips |                   |            | 95+                           |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | Estimated on similar coating  |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | 5                             |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | 94                            |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | 7000-8000 psi                 |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | 9000 - 10000                  |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | 13700                         |                 |            |             |  |  |
|  |                                                                                                                                                                      |                   |            | 12200                         |                 |            |             |  |  |
|  | Elongation at Brea                                                                                                                                                   | •                 | 100 - 110% |                               |                 |            |             |  |  |
|  | Tear Strength (PLI), ASTM D2240                                                                                                                                      |                   |            | 50                            |                 |            |             |  |  |
|  | VOC (g/L) 0                                                                                                                                                          |                   |            |                               |                 |            |             |  |  |
|  | *DI                                                                                                                                                                  | 414-41            |            |                               |                 |            |             |  |  |



\*\*Please note that the indicated viscosity is for clear product only.

Any addition of colorant may affect the viscosity.\*\*





## **Aliphatic Polyaspartic**

| SURFACE<br>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 produc application. Do not apply onto wet substrates. Chloride, moisture, and pH levels should be checked prio to application. Strongly recommended to use primer (FT-100) prior to application of PLATINUM 100. 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). Shot blasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. PLATINUM 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 mineach 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.                                                                                                                                                        |
| 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 remove mechanically. If the product splatters, wash thoroughly with hot soapy water.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| OVERLAPS               | Subsequent overlaps must be applied when primer is still wet or tacky. If primer has dried, reprime. Porou substrates may require multiple priming.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| SUGGESTIONS            | Sprinkle the primed area lightly with aggregate to provide better footing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| RESTRICTIONS           | <ul> <li>Minimum/Maximum temperature of substrate: 15°C / 30°C (59°F / 86°F).</li> <li>Maximum relative humidity during application and curing: 85%.</li> <li>Humidity content of substrate must be &lt; 4% when coating is applied.</li> <li>Do not apply on porous surfaces where a transfer of humidity may occur during application.</li> <li>Protect from humidity, condensation and contact with water during the 24-hour initial curing period.</li> </ul>                                                                                                                                                                                                                                                                                                        |
| HEALTH<br>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 irritation, move affected person to fresh air Remove contaminated clothes and clean before reuse.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                        | Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with product may cause serious burns Avoid breathing vapors release 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. Work in well ventilated area.                                                                                                                                                                                                                                                                                                |
|                        | *Consult the material safety data sheet for further information.*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| IMPORTANT<br>NOTICE    | All statements, recommendations and technical information contained in this document are accurate to the best knowledge of FREEDOM COATINGS CANADA CORP. 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. FREEDOM COATINGS CANADA CORP. assumes no legal responsibility for use upon these data. FREEDOM COATINGS CANADA CORP 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. |



## **Aliphatic Polyaspartic**

| CHEMICAL RESISTANCE              |                |  |  |  |  |
|----------------------------------|----------------|--|--|--|--|
| CHEMICAL                         | RESULTS (25°C) |  |  |  |  |
| Acetic Acid 100%                 | C              |  |  |  |  |
| Acetone                          | С              |  |  |  |  |
| Ammonium Hydroxide 50%           | RC             |  |  |  |  |
| Benzene                          | С              |  |  |  |  |
| Brine Saturated H <sub>2</sub> 0 | R              |  |  |  |  |
| Chlorinated H <sub>2</sub> 0     | R              |  |  |  |  |
| Clorox (10%) H <sub>2</sub> 0    | R              |  |  |  |  |
| Diesel Fuel                      | RC             |  |  |  |  |
| Gasoline                         | RC             |  |  |  |  |
| Gasoline/5% MTBE                 | RC             |  |  |  |  |
| Gasoline/5% Methanol             | RC             |  |  |  |  |
| Hydrochloric Acid 20%            | R              |  |  |  |  |
| Hydrochloric Acid 10%            | NR             |  |  |  |  |
| Hydraulic Fluid (oil)            | RC             |  |  |  |  |
| Isopropyl Alcohol                | R              |  |  |  |  |
| Lactic Acid                      | RC             |  |  |  |  |
| MEK                              | RC             |  |  |  |  |
| Methanol                         | R              |  |  |  |  |
| Methylene Chloride               | С              |  |  |  |  |
| Mineral Spirits                  | RC             |  |  |  |  |
| Motor Oil                        | R              |  |  |  |  |
| MTBE                             | С              |  |  |  |  |
| Muriatic Acid 10%                | R              |  |  |  |  |
| NaCl/H20 10%                     | R              |  |  |  |  |
| Nitric Acid 20%                  | NR             |  |  |  |  |
| Phosphoric Acid 10%              | R              |  |  |  |  |
| Phosphoric Acid 50%              | NR             |  |  |  |  |
| Potassium Hydroxide 10%          | R              |  |  |  |  |
| Potassium Hydroxide 20%          | R, Dis         |  |  |  |  |
| Propylene Carbonate              | RC             |  |  |  |  |
| Skydrol                          | С              |  |  |  |  |
| Sodium Hydroxide 25%             | R              |  |  |  |  |
| Sodium Hydroxide 50%             | R, Dis         |  |  |  |  |
| Sodium Hypochlorite 10%          | R              |  |  |  |  |
| Sodium Bicarbonate               | R              |  |  |  |  |
| Stearic Acid                     | R              |  |  |  |  |
| Sugar/H <sub>2</sub> 0           | R              |  |  |  |  |
| Sulfuric Acid 10%                | R              |  |  |  |  |
| Sulfuric Acid >50%               | RC             |  |  |  |  |
| Toluene                          | R              |  |  |  |  |
| 1,1,1-Trichloroethane            | С              |  |  |  |  |
| Trisodium Phosphate              | R              |  |  |  |  |
| Vinegar/H <sub>2</sub> 0 5%      | R              |  |  |  |  |
| H <sub>2</sub> 0                 | R              |  |  |  |  |
| H <sub>2</sub> 0 14 days at 82°C | R              |  |  |  |  |
| Xylene                           | RC             |  |  |  |  |



R = Recommended/ little or no visible damage

RC= Recommended Conditional/ some effect, swelling or discoloration

C= Conditional/ cracking-wash within one hour of spillage to avoid affects

NR= Not Recommended

Dis= Discoloration