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Thermablock™ FRC Resin Application Instructions

Thermablock™ FRC Resin has been developed as an impregnation resin for glass fiber and carbon fiber composites. It is intended to offer a thermal barrier for conventional fiber composites. The resin is moisture cured and contains solvents and, therefore, should be used in open mold processes.

1.0 PRODUCT STORAGE AND HANDLING

- 1.1 Store materials between 32°F and 100°F
- 1.2 Store materials in their original sealed containers. Do not open containers until they are to be used. This resin is moisture cured and opening the containers can reduce the material's shelf life.
- 1.3 The coating materials must be used within the manufacturers published shelf life.

2.0 SURFACE PREPARATION

- 2.1 Wipe off the surface with an isopropanol-soaked cotton towel or rag. On very smooth surfaces, it may be necessary to roughen the surface with 120 grit sandpaper to obtain good adhesion. Clean the sanding dust off with IPA.

3.0 MIXING

- 3.1 The Thermablock FRC resin system is pre-packaged in containers with the proper mix ratio. Parts A and B are the two components that will be mixed together. Stir component A with a mechanical mixer before blending. Make sure that the settled material is completely mixed.
- 3.2 Blend Part A resin and Part B hardener by pouring the entire contents of Part B into Part A. Mix with a mechanical stirrer until the blend is uniform. If a mechanical stirrer is not available, blend with mixing stick until mixture become uniform in thickness and appearance.
- 3.3 The pot life is approximately 8 hours.

4.0 APPLICATION

- 4.1 Thermablock FRC Resin can be applied using standard hand lay-up techniques. Pour resin onto surface that is to be topcoated. Spread material out to fully cover the surface. Add fiber mat or cloth to the surface. Press mat/cloth with edge of a tongue depressor or similar stick, grooved hand lay-up roller, fingers or other appropriate device. Add a top layer of resin and work it into the mat/cloth. Make sure there are no holes or voids in the layer.
- 4.2 Repeat process to buildup layers to the desired thickness. The top layer can be finished with a veil mat or with a thicker layer of resin if a smooth surface is desired.
- 4.3 The material will be dry-to-touch within two hours.
- 4.4 Allow 24 hours for full cure.
- 4.5 Other composite application procedures have not been fully explored.

5.0 CLEAN-UP

- 5.1 Use isopropyl alcohol (IPA), methylethylketone (MEK) or acetone as clean-up solvent. Flush and clean up spray equipment after completion of the coating applications. **THESE SOLVENTS ARE FLAMMABLE.**
- 5.2 All surplus mixed materials and empty containers should be discarded in accordance with appropriate local and federal regulations.
- 5.3 When using reactive materials, it is necessary to clean equipment thoroughly after each use. Most catalyst-cured materials will not dissolve in solvents after partial or complete cure.

6.0 SAFETY

- 6.1 Before starting the coating application, it is recommended that the operator read all the available safety data including, but not limited to, the material safety data sheet and the product data sheet. The basic premise of safety in surface preparation, coating application and inspection is being aware of the potential hazards.
- 6.2 The resin and cleaning solvents are all flammable. Keep them away from open flames and spark sources.
- 6.3 All electrical equipment shall be properly grounded per OSHA regulations.
- 6.4 Refer to OSHA regulation 29 CFR 1910 pertaining to work in confined areas.
- 6.5 Proper personal protection equipment; including safety glasses or goggles, chemical resistant gloves, and a NIOSH/OSHA approved respirator are strongly recommended.

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