

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =

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## INSTRUCTIONS FOR HANDLING, STORING, & THAWING PREMIXED & FROZEN (PMF) PRODUCTS

The product you have received is a two component resin system that has been precisely weighed, mixed, degassed, and packaged. The mixed system is then quickly frozen at -40°C to -80°C to retard the chemical reaction between components of the curing polymer. This product is shipped via expedited freight in insulated containers with -80°C dry ice, or for some products not compatible with dry ice, with 14°C blue ice gel packs. Once the product is allowed to thaw it will begin to cure, the chemical reaction continuing at a relatively fast rate. Therefore, it is very important that upon receipt of the shipment the PMF product is transferred to a -40°C freezer without any additional handling or delay. Delays in shipment and delays in receiving must be avoided as the PMF package must be transferred to a -40°C freezer with 48 hours of shipment to maintain product quality. Special packaging can be used to extend the 48 hour window for international shipments.

PMF products must equilibrate to -40°C prior to warming them to room temperature for use. Equilibration should occur within 24 hours maximum of placing the product in a -40°C freezer. If a PMF product is brought from -80°C directly to room temperature there is a high probability of creating irreversible air voids.

Prior to application or use, allow the PMF product to thaw naturally to room temperature (20°-25°C). PMF product packaged in syringes or cartridges should be allowed to thaw vertically, with the dispense tip up. Accelerating the thaw processes by exposure to heat sources such as ovens, hot air guns, hot plates, or warm water baths is not recommended. Thaw time varies from 10 minutes to two hours depending on the type and size of the PMF package. Wipe all excess moisture off the package prior to use.

Once thawed to room temperature, the product must be applied within the specified work life, and then discarded. In most cases, excess cured material can be disposed of as non-hazardous waste. We do not recommend that PMF product be refrozen and reused after the initial thaw.

CAUTION: USE THICK PROTECTIVE RUBBER GLOVES WHEN HANDLING DRY ICE. READ AND UNDERSTAND THE SDS PRIOR TO PRODUCT USE. WEAR ALL RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT.