Product Data Sheet ARMOR-VAC[™] - AVEC 15 Advanced Polymer Elastomer





Bonding Fixtures – Bladders – Blankets – Debulking – Maskants – Prepreg/Infusion Curing

Product Description

ARMOR-VAC[™] Advanced Polymer Elastomers are a copolymer elastomer compound formulated for spraying, brushing or thin film casting onto a surface and air dried into a durable film that provides useful flexible membranes for many applications.

With extreme puncture and tear resistance and a high degree of elongation, ARMOR-VAC[™] AVEC 15 is ideal for; masks, blankets, debulks, bond fixtures, prepregs and resin infusion applications. Excellent diffusion barrier and chemical resistance and good service temperature tolerate exotherm spikes of many Polyester, Vinylester resins and oven cure cycles for epoxy resins/prepregs (250F). ARMOR-VAC[™] Advanced Polymer Elastomers provide significantly better performance against epoxy resin systems compared to silicone compounds/membranes. **AVEC 15** does not contain any silicone.

Membrane Characteristics

Spray formable membranes enable prompt fabrication of net shape, seamless vacuum bags on nearly any surface regardless of size or geometric complexity. ARMOR-VAC[™] vacuum bags do not require any mesh reinforcement and therefore, can weigh up to 80% less than comparable articles made from Silicone, EPDM or Urethane.

Packaging & Handling

Shipped in a 5 gallon pails. Special order 50 gallon drums are available. Winter shipping requires freeze protection. Store indoors in sealed container at 50°- 90°F. Shelf life up to 18 months in controlled storage (nom.75°F).

Cleanup & Disposal

Use only *Distilled* Water to clean tools & spray equipment. Pour effluent into a shallow pail and use cardboard or other absorbent material to dry it into a non-hazardous solid state. Always follow local disposal regulations for handling solid waste. Dried film peels from non-porous surfaces.

In Liquid State	<u>AVEC 15</u>
Appearance	Translucent / Tan
Freezing Point	32°F
Boiling Point	212°F
Specific Gravity	0.94
Solubility in Water	Miscible

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Material Application Surface Preparation

Surfaces should be clean and free of oils, waxes and releases. Smooth non-porous surfaces provide the best foundation for spray fabrication of a membrane.

Material Preparation

If practical, keep material between 70°F-80°F. Use a clean stir mixing stick to stir material before use. Pail lids are provided with small bung hole opening to accept the spray equipment pickup tube.

Spraying Conditions

ARMOR-VAC[™] are preferably applied in a vented, dust free room maintained at a temperature between 70° - 85°F. Avoid runs on vertical surfaces by applying 10 - 12 total wet mils on each spray cycle. Ideal horizontal surface build is less than 12 wet mils for each spray cycle and between each drying stages.

Drying Stages

Dry the wet film using forced air flow, preferably heated to 120° - 145°F for approx. 15 mins. after spray passes. A humid environment and ambient temperatures below 75°F will increase drying time.

Post Cure

It is recommended to expose the ARMOR-VAC[™] membrane contact surface to heated air at 180°F for 3 hours to achieve optimal cure followed by recommended bag treatment application.

Precautions

Please refer to SDS for proper safe handling and storage information. Wear personal protective equipment including protective eyewear and gloves. Follow OSHA guidelines for personal protective equipment and operating procedures for specific type of spray equipment being used. Always ground dried/cured membranes to dissipate static charge build up between the membrane and working surface.

As a Cured Film	AVEC 15
Color	Translucent / Tan
Elongation	800%
Specific Gravity	1.02
Short Duty Cycles	300°F
Sustained Exposure	260°F

Disclaimer – The technical data represented was measured under controlled laboratory conditions and is subject to change without notice. Actual performance of a cured ARMOR-VAC[™] membrane depends upon resin compatibility, bag handling & care, manufacturing conditions and other events out of our control. Therefore, no warranty or guarantee of any kind is made by ARMOR-VAC/GRF Comm Provisions of Nevada, Inc. express or implied, statutory, by operation of law, or otherwise, including merchantability and fitness for a particular purpose.. GRF Comm Provisions of Nevada, Inc. - © 2023