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Acculam® Matrix HT™ G14

Technical Data Sheet

Typical Properties	Typical Value	Units
Physical Data		
Specific Gravity / Density	1.81	---
Water Absorption -.125"	<0.6	%
Tg-DMA method -.125"	280 / 536	°C / °F
Rockwell Hardness	117	M scale
Bond Strength	> 1,450/658	lbs / kgs
Flexural Strength 0.062" thick		
Lengthwise (LW) -Condition Ambient	>60,000 / 414	PSI / MPa
Crosswise (CW) -Condition Ambient	>60,000 / 414	PSI / MPa
LW & CW at 150C / 302F x 1 hour	>50,000 / 345	PSI / MPa
LW & CW at 220C / 428F x 1hour	>35,000 / 241	PSI / MPa
LW & CW at 260C / 500F x 1 hour	>30,000 / 207	PSI / MPa
Izod Impact Strength -LW	>17	ft.-lbs. / in.
Izod Impact Strength -CW	>14	ft.-lbs. / in.
Compressive Strength -Flatwise	>60,000 / 414	PSI / MPa
Shear Strength -A -.125"	>20,000 / 138	PSI / MPa
Electrical Data		
Dielectric Breakdown -Condition A	>65,000	Volts
Dielectric Strength -Step by Step -.125"	>450	VPM
Arc Resistance	>180	seconds

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Accurate provides this data as information only and does not imply any warranty for its use or application.

Product Description: Acculam® Matrix HT™ is a new thermoset composite comprised of woven fiberglass and a unique blend of high-temperature resin binders designed for applications that demand superior performance at elevated temperatures. Designed as a cost-effective alternative to Engineered Thermoplastics, Matrix HT has outstanding flexural and impact strength, maintains a high percentage of mechanical & insulating properties up to 5000F. Matrix HT offers excellent dimensional stability and creep resistance as well as good resistance to moisture, chemicals, alkali, and acids. It does not melt or soften at elevated temperatures and offers users extended application capability beyond typical NEMA grades.

The **Matrix HT** system is a great example of our commitment to utilizing our extensive research and development capabilities to design a high technology, cost effective composite system with world class leading performance. It is a well-established composite laminate system suitable for a number of different applications; including yours. Speak to an Accurate Plastics representative today for more information on this exciting, high performance product.

Industrial high-pressure laminates are thermoset resin impregnated, fiber reinforced materials that are cured under heat and pressure to form structures having excellent strength and stiffness to weight ratios as well as outstanding electrical insulating properties.

Accurate Plastics produces high pressure laminates utilizing a variety of reinforcing fibers combined with highly engineered, advanced and proprietary resin formulations. These laminates are available in sheet, cut pieces, tubes, rod and pre-impregnated roll goods (**prepreg**).

Accurate Plastics also provides resin impregnated fabric (**prepreg**) solutions for customers looking to perform their own molding of advanced composite structures. These **prepregs** are suitable for a number of molding processes such as compression molding, vacuum bag molding, tube rolling and others. Available resin systems include epoxies, phenolics, polyesters and other highly sophisticated formulations. Cure conditions can range from 150F to 350F and, depending on the formulation, be molded at pressures as low as 15 psi. Modified systems that are fire resistant, high temperature resistant, toughened as well as self-adhesive are available.

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