# **ABR ORGANICS LIMITED**

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PRODUCT TYPE

POLYIMIDE RESIN Two component system

### SPECIFICATIONS OF ABRON BR732 - A

:

- 1. State : Fine Powder
- 2. Color : Light yellow / cream
- 3. Melting Point : 150 160° C
- 4. Bulk Density : 0.2 0.3 gm /cc

# SPECIFICATIONS OF ABRON BR732- B

- 1. State : Viscous Liquid
- 2. Appearance : Clear Brown solution
- 3. Specific Gravity : 1.04 1.09
- 4. Odor : Mild Phenolic
- 5. Viscosity : 13000 35000 cps

#### **APPLICATIONS:**

This resin system offers excellent thermal stability & (> at elevated temperatures 300°C). The performance laminates made using ABRON BR732 system exhibit outstanding toughness & moisture resistance. This resin system can be used for the manufacture of composites where high temperature resistance & good mechanical properties at elevated temperatures are desired.

This resin can be used for advanced composite applications by prepreging technique. The resin system can be melt processed and can be used as a high temperature structural adhesive. The prepregs can be molded into laminates that find application in printed circuit boards. The resin system is also amenable for polar & filament winding applications. ABRON BR732 System also finds application as thermal resistant coatings.

TENSILE PROPERTIES	TEMPERATURE	VALUES
Strength, psi:		
Dry"	<b>Room temperature</b>	13,600
Wet''	•	12,800
Dry	148 <sup>0</sup> C	10,100
Wet		6,900
Dry	240 <sup>0</sup> C	10,400
Modulus, psi:		· · · · · · · · · · · · · · · · · · ·
Dry	<b>Room temperature</b>	5,64,000
Wet	-	5,49,000
Dry	148 <sup>0</sup> C	4,12,000
Wet		3,12,000
	204 <sup>0</sup> C	3,94,000
Elongation, %	Room temperature	
Dry	-	3.00
Wet	148 <sup>0</sup> C	3.40
Dry		3.05
Wet	204 <sup>0</sup> C	3.20
		4.60
Water pickup, %		1.50
Compression properties	<b>Room temperature</b>	-
Yield strength, psi	•	30,400
Ultimate strength, psi		-
Modulus, psi		3,60,000
Compression at yield, %		13.60
Compression at failure,%		
T <sup>g</sup> , <sup>0</sup> C (by Dynamic		
Thermal	Dry	310
Analysis (DMA))	Wet	297
Fractural energy, inlb/in. <sup>2</sup>		1.20

## Properties of ABRON BR-732 Laminates

"Curing: 1hour at 180°C and 2 hours 200°C and 6 hours at 250°C.

"Wet: Samples evaluated after exposure to 100% humidity at 38°C for 2 weeks.

The product information or recommendations offered, either in writing or verbally, is a part of service information to our customers, and these are based on test results carried out by us based on the current state of our knowledge. Customers are requested to independently evaluate the suitability of the ABROL products for each application. The information provided is for the use by persons having technical skill, at their discretion & risk and no liability can be accepted in respect of information provided and no warranties are intended as the condition of application are beyond our control.