

ABR ORGANICS LIMITED

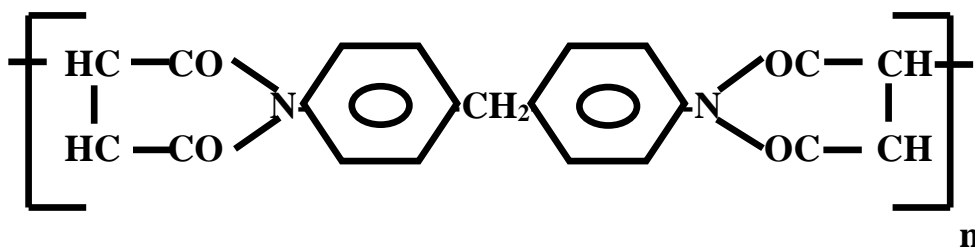
(An ISO 9001:2015 Certified Company)

A-3, Sri Madhava Apartments, H.No.2-2-23/41/4&5, Bank Colony, Bagh Amberpet,
Hyderabad – 500 013. Telangana, INDIA

Tel: 0091-40- 2742 6058 ; Tele Fax: 0091-40-2742 6059

E-mail: info@abrorganics.com ; knaveenc@abrorganics.com

PRODUCT NAME : ABRON BR 720
PRODUCT TYPE : BISMALLEIMIDE TYPE POWDER RESIN



Typical Physical Properties of ABRON BR720

<u>RESIN</u> <u>Uncured Resin</u>	Appearance Melting point (° C) DSC Exotherm peak temperature, (°C) Bulk polymerization energy, J/g	Yellow ~ 70 – 90 ° C ~ 260 ° C > 180 ° C
<u>CURED RESIN</u>	<u>Colour</u> <u>Mechanical Properties</u> Tensile strength, psi Tensile modulus, psi Flexural strength, psi Flexural modulus, psi Flexural strain to failure, % Fractural energy, in.-lb/in.² Glass transition temperature, °C	Brown 6-12 x 10³ 6-7 x 10⁵ 11-21 x 10³ 5-7 x 10⁵ 1.3-2.3 0.14-0.19 230-290

PROPERTIES OF ABRON BR-720 COMPOSITES:

Testing Standard	:	BS 3953 PI - 1
Reinforcement	:	Glass Fabric
Resin	:	Polyimide
Colour	:	Dark Brown

Mechanical Properties:

Flexural Strength (ISO 178), 200° C	1	500 MPa 360 MPa
Modulus of Elasticity (ISO178)	1	25,000 MPa
Compressive Strength (ISO 604)	1	650 MPa
Izod Impact Test (ISO 180/2A)	1	55 kJ/n ²
Shearing Strength (EN 60893-2)	1	70 MPa
Tensile Strength (ISO 527)	1	300 MPa

Electrical Properties:

Electric Strength (IEC 243-1)	2	20 kv/mm
Permittivity (IEC 250)	3	4.0 at 50Hz.
Dissipation Factor (IEC 250)	3	0.01 at 50 Hz.
Insulation systems (IEC 167)	4	1000 M Ω
Comparative Tracking Index (IEC 112)	1	250 CTI

PHYSICAL AND THERMAL PROPERTIES:

Thermal Endurance Index, 20,000 hrs. (IEC 216)	-	180 - 240° C
Flammability (IEC 707)	1	FV 0
Density (IEC 1183-A)	1	1.95 gm/cm ³
Water absorption (IEC 62-1)	4	15 mg.

Conditioning:

1. 24h/23° C/ 50% RH
2. 24h/23° C/50% RH + 1h in oil at 90° C
3. 96h/105° C + 1h/23° C/20% RH
4. 24h/50° C + 24h in water at 23° C
5. 96h/105° C + 1h in oil at 90° C

SPECIFICATIONS OF ABRON BR720:

APPEARANCE : **YELLOW TO ORANGE COLOUR**

STATE : **POWDER**

BULK DENSITY : **0.5 – 0.8 gm/cc**

MELTING POINT : **80 – 110° C**

INHERENT VISCOSITY : **0.03 – 0.06 dl/gm**

SOLUBILITY : **SOLUBLE IN DMF/DMAc/NMP**

FREE MDA CONTENT : **< 0.12 %**

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.