

Technical Information Division Epoxy / Phenolic Resins Moulding Compounds

Bakelite® PF 2736-9005-S 1		typical Review	ed on: 16.02.2
roperty:	Standard	Value	Unit
Density * (23 °C)	ISO 1183	1,57	g/cm³
Apparent density (moulding compounds)	ISO 60	0,73	g/cm³
Injection - Moulding shrinkage	ISO 2577	0,62	%
Injection - Post shrinkage	ISO 2577	0,49	%
Compression - Moulding shrinkage	ISO 2577	0,36	%
Compression - Post shrinkage	ISO 2577	0,43	%
Tensile strength * (5mm/min)	ISO 527 - 1/2		MPa
Tensile modulus * (1mm/min) **	ISO 527 - 1/2		MPa
Compressive strength (test specimen flat to	ested) ISO 604	230	MPa
Flexural strength (2mm/min)	ISO 178	95	MPa
Flexural modulus	ISO 178	9.000	MPa
Charpy impact strength * (23 °C)	ISO 179-1 eU	7,0	kJ/m²
Charpy notched impact strength * (23 °C)	ISO 179-1 eA	1,3	kJ/m²
Ball indentation hardness (H961/30)	ISO 2039/P1	300	MPa
Temp. of deflection under load. HDT C-8,0	MPa 1SO 75-2	130	°C
Surface resistivity * ²		1E+11	Ohm
Volume resistivity * ②		1E+12	Ohm * cm
Dissipation factor * (100 Hz) 3		0,3	
Relative permittivity * (100 Hz) 3		13,5	
Electric strength * (1mm thickness) ®	IEC 60243-P1	20,0	kV/mm
Proof tracking index * (Test liquid A)	IEC 60112	175	PTI
Flammability UL 94 ^⑤	UL 94 V-0 / 0	0,46mm (BK)	Step/mm
1832	V-0 / 0	0,81mm (NC, GN, BK)	
Water absorption (24h / 23°C) [©]		50	mg
Additional characteristics		.5, D, UL	
Arc	ptional Suffix "H" Resistance ASTM D-4 nparative tracking inde		175

Storage capability

2 years

(relative humidity of 50 - 60 % and maximum storage temperature of approximate 20°C)

Product description:

Phenolic moulding compound, inorganically/organically filled, increased tracking resistance, UL listed moulding compound 0,46 mm / V-0 (BK, Suffix "H"), 0.81 mm / V-0 (NC, GN, BK), 1.5 mm/ V-0 (ALL).

Application areas:

Bobbins, relays, circuit prot. switches MCB housings, pump parts, sealing flanges, insulating caps, electrical switch gears and lamp holders.

This data sheet is valid until 16.02.2007 . Should this material be purchased after the validity date stated, please request an up-to-date data sheet.

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160 - 190 °C

Moulding conditions: Bakelite ® PF 2736-9005-S 1

Injection molding

Temperature of material 80 - 100 °C Mould temperature 160 - 190 °C Curing time (per mm of wall thickness) 10 - 20 s

Barrel temperature - Feed zone 60 - 75 °C

Barrel temperature - Nozzle zone 80 - 100 °C

Cavity moulding pressure >15 MPa

Back pressure 0,5 - 2 MPa

Holding pressure ca. 60% of injection pressure

Technical Customer service:

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Additional characteristics (see datasheet):

.5 - Improved electrical properties .7 - Allowed for contact with food

.9 - Ammonia free
A - High surface quality
Cu - Copper adhesive

D - Low shrinkage / good dimensional stability

E - Elastified

EL - For electrostatic coating

ES - Acetic acid free

G - galvanize

HS - High mechanical strength

Compression moldin

Mould temperature

Cavity moulding pressure

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HT - Resistant to high temperatures

LB - High arc resistance
M - Dishwasher proof

P - Prod. of test spec. only comp. moulding

Curing time (per mm of wall thickness) 20 - 40 s

T - Low coefficient of friction

Typ - Standardized moulding compounds UL - UL listed moulding compound

UV - Non fade

V - yellowing resistance

Z - Special presentation cyl. pellets

L - conductiv

Explanations:

① Elongatio & 0,05%, & 0,25%

② Following IEC 60093

3 Following IEC 60250

(4) Short term, electrode layout P25mm/P25mm in transformer oil equivalent to IEC 60296.

© UL 94 colour designation:

ALL = all colours, BG = beige, BK = black, BN = brown, BL = blue, GN = green, GY = grey, NC = natural, OR = orange, RD = red, WT = white, YL = yellow

© Following ISO 62

Properties marked with * are elements of the database CAMPUS (Computer Aided Material Preselection by Uniform Standards) and are based on the obliging introduced guide lines of the norm comitee of plastic. (CAMPUS: is a registrated trademark of the CWFG)

Preparation of test specimens of thermosetting moulding compounds:

Compression to ISO 295, Injection to ISO 10724

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