

Product information Flexonal® VR 80/760/4

Material type	: Compact cast system Developed in accordance to VDE 0291 Part 2 of October 25, 1994
Characteristics	: Component A – Flexonal® VR 80/760/4 (Polyetherpolyol) Component B – Flexonal® VR 80/980 (Diphenylmethan-Diisocyanat, MDI)
Application	: Electronic insulation, molded parts

General characteristics

	Density (20°C)		Viscosity (20°C)	
Flexonal® VR 80/760/4	1.04	g/cm ³	2440 ± 300	mPa*s
Flexonal® VR 80/980	1.22	g/cm ³	210 ± 30	mPa*s

Delivery form

VR 80/760/4	VR 80/980
30 kg	30 kg
60 kg	60 kg
200 kg	200 kg
600 kg	600 kg

Storage

- Store temperature 15°C – 30°C
- Avoid direct sunshine
- Keep containers under lock and key
- When stored in a tank or in the working container of the machine, avoid contact with non-ferrous metals
- Storage stability 6 month

Safety instructions

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from Bachmann Kunststoff Technologien GmbH subsidiaries.

Reaction behavior

(Beaker test at 20°C, standard value)

Mixture ratio	: Flexonal® VR 80/760/4 = 100 g Flexonal® VR 80/980 = 45 g
Pot life	: 1-3 min.
Density	: ca. 1350 kg/m ³

Modifications of the reaction behaviour are available.

Processing instruction

Processing machine	: All kind of casting machines
Preparation	: very good homogenisation before use.
Material temperature	: 23 ± 2°C
Mould temperature	: 40 – 50°C

Mechanical characteristics

Density (DIN 53420)	: 1350	kg/m ³
Härte Shore A (DIN 53505)	: 85	
Compressive strength (30% compression)	: >42	
Hydrophobicity test	: 2,5	100ml. Gas amount
Volume shrinkage	: >3	%
Tear strength (DIN 53515)	: >22,8	N/mm ²
Elongation to break (DIN 53515)	: 48	%
Tear resistance (DIN 53515)	: 10,4	N/mm
Thermal conductivity	: 0,455	W/Km
Burning behavior	: BH3 (IEC 707 BH)	
	: 1.8	N/mm ²
Electrolytic corrosion (DIN 16946)	: Al	
Contact resistance 23°C	: 1,4 x 10 ¹⁵	Ohm*cm
Contact resistance 80°C	: 2,9 x 10 ¹¹	Ohm*cm
1 d Water storage	: 7,1 x 10 ¹⁵	Ohm*cm
Dielectric loss factor (VDE 0303 T 4)	: (nx 10 ⁻⁴)	
at 23 ° C and 50 Hz	: 293	
at 23 ° C and 1 kHz	: 195	
Dielectric constant (VDE 0303 T 4)	:	
at 23 ° C and 50 Hz	: 3,5	
at 23 ° C and 1 kHz	: 3,2	
Creep resistance	: KA 3c	
Dielectric strength (VDE 0291 T 2)	: 33	kV/mm
Flash point in the open cup	: >170	°C
Temperature stability approx.	: short-term up to 200°C, permanent temperature 160 °C	

The casting compound has the following properties:

- made from natural raw material
- recycling possible, thus reducing waste
- no dangerous goods to be transported, therefore usable internally without any problems
- no warming up before mixing
- mix for approx. 3 minutes (manual processing)
- direct potting down to -15 ° C
- low reaction temperature
- no softening of PE insulation
- for all conductor insulation
- high adhesion to lead, aluminum, copper and steel
- for voltages over 10 kV
- Halogen free
- No skin resorption

For more detail information about **Flexonal® VR 80/980** quod vide separated technical data sheet.

These figures are intended as a guide and should not be used in preparing specifications.

The characteristics stated have been determined in accordance with the stated DIN regulations. The test specimens required were taken either from serial coatings or from test plates manufactured under production conditions.