KARL SCHUPP AG

CONDUCT – PROTECT – INSULATE



Vulcanized fiber is a flexible and high-performance electrical insulation material, which is particularly suitable for applications in transformers, electric motors and machines with high requirements. With excellent thermal and electrical insulating properties vulcanized fiber ensures reliable and durable insulation in demanding environments.

Produced on the basis of organic renewable raw materials, Vulkanfiber is characterized by the below mentioned properties:

Vulcanized Fiber

Specifications

- High mechanical strength with low weight
- Good antistatic properties
- Good electrical insulation properties (spark-quenching)

Heat class Y (95 °C)
Material on rolls from 0.2 - 2 mm
Sheets, homogeneous from 0.5 - 12 mm
Sheets, layered from 5 - 100 mm

Technical data

Data	Unit	DIN 7737	Technical quality typical values VF3110/3111	Electrical quality typical values VF3120/3121	Thermoforming quality typical values VF3110/3111
Density:	g/cm3	1,2-1,45	1,2 - 1,3	1,2 - 1,3	1,2 - 1,3
Basis weight:	g/m2				
Zinc content:	%ZnCl2/TS	0,1/0,04	0,05	0,02	0,05
Humidity:	%	< 10	8	7	10
Ball pressure hardness:	N/cm2	> 70	100	100	100
Impact strength:	kJ/m2	to	120	120	120
Notched impact strength:	kJ/m2		30	30	30
Ratio q/l:	Factor		0,6	0,6	0,6
Longitudinal tensile strength (MD):	kp/cm2	> 70	80	80	80
Transverse tensile strength (CD):	kp/cm2	> 45	50	50	50
Elongation lengthwise (MD):	%	> 7	12	12	16
Transverse elongation (CD):	%	> 8	15	15	22
Conductivity w.ex:	µS/cm	< 120	40	40	40
pH value w. Exc:		5 - 7	6	6	6
Dielectric strength:	kV/mm	> 5,2	5.2 - 8 depending on thickness	6 - 10 depending on thickness	5.2 - 8 depending on thickness
Temperature resistance	95 °C:		unlimited	unlimited	unlimited
Temperature resistance	130 °C:		several hours	several hours	several hours
Temperature resistance	180 °C:		short term	short term	short term
Thermal conductivity:	W /mK		0,31	0,31	0,31