

## Technical material data

# Tube EP GC 22 EN 61212

HGW 2375.4 | G-11

**CARRIER:** glass filament fabric  
**MATRIX:** modified epoxy resin

MECHANICAL PROPERTIES	unit	test value	norm value
flexural strength	MPa	300	300
tensile strength	MPa	200	-
compressive strength parallel to laminations	MPa	150	175

ELECTRICAL PROPERTIES			
insulation resistance	MΩ	-	1*10 <sup>3</sup>
dielectric strength (1-minute test voltage) at 90°C in oil parallel to the layer direction	kV	40	40
dielectric strength (1-minute test voltage) at 90°C in oil perpendicular to the layer direction	kV/mm	13,3	7,7
dissipation factor at 48-62 Hz	max.	-	(0,05)
dissipation factor at 1 MHz	max.	-	(0,04)
permittivity at 1 MHz	max.	-	5,2
tracking resistance	CTI	100	-
temperature limit	W/m*k	155 / 180*	(155)

OTHER PROPERTIES			
raw density	g/cm <sup>3</sup>	1,8	(1,7-1,9)
water absorption at 3 mm thickness	mg/cm <sup>2</sup>	-	1,5

### PROPERTIES

- high mechanical properties at temperatures up to 155°C / 180°C
- good stability of electrical properties at higher humidity
- excellent mechanical and electrical strength
- very low water absorption
- high thermal stability (155-250°C)

### APPLICATIONS

- mechanical and electrical applications
- highly stressed mechanical parts in mechanical and electrical engineering with additional thermal stress

\* TI 180°C available on demand

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The values in ( ) are specific values which are only noted for information; they cannot be seen as a requirement of this norm. The stated values are average values which are confirmed by regular statistical tests and controls. These data are pure representative information and may only lead by an explicit agreement to an assurance for a sales agreement. Directive 2011/65/EU of European Union on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) became operative as from the 27st of January, 2011. Following substances namely are involved: lead, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers, mercury. We herewith declare that all of our products were manufactured RoHS conformal. As downstream users (i.e., as manufacturer of products), we act in accordance with European Union Regulation 1907/2006 (the REACH Regulation). According to information provided to us by our suppliers, no substances from the latest Candidate List (the List of Substances of Very High Concern, or SVHC List) from the 15th of June, 2015 exist in the materials used by us in concentrations of more than 0.1 % by mass.