

# VINILGRAPH CONDUCTIVITY 82

## 1. DESCRIPTION

Bisphenol A epoxy-based vinyl ester resin with graphene materials. It is a premium resin with improved reactivity and purity. It provides excellent corrosion resistance to a wide range of organic and inorganic acids, alkalis, oxidizing agents, and salts in solution. It has excellent mechanical properties in tensile and bending. In addition, it can be used with fiberglass and carbon fiber. It has high electrical conductivity since its resistivity of  $100 \Omega^*m$ .

## 2. PROPERTIES

- Very low material resistivity approximately  $100 \Omega^*m$  as semiconductor.
- Excellent performance against resistance to chemical agents.
- Fully compatible with carbon and glass fibre.
- High mechanical properties.

## 3. APPLICATIONS

- In applications where the material is required to have electrical conductivity.
- Good intercoat adhesion and very low linear and volumetric shrinkage.
- The percentage of mek peroxide should be between 1% and 1,5%, although it can be increased up to 2% to reduce the gel time.
- The application can be manual or by machine.
- May be used in laminating processes.

## 4. TECHNICAL CHARACTERISTICS

<b>Appearance</b>	Dark liquid
<b>Density (kg / cm<sup>3</sup>)</b>	1.1 – 1.3
<b>Gel time [25°C] (min)<sup>1</sup></b>	8 – 10
<b>Viscosity Brookfield [H3, 25°C] (cP)</b>	1000 – 2000
<b>Resistivity (Ω*m)</b>	100 – 200

(1) 100/6% CoOct, 0,3%/1,2% PMEK

## 5. MECHANICAL CHARACTERISTICS

	APPLY STANDARD	VALUE
<b>Flexural modulus (MPa)</b>	UN 14125	3 000 – 4 500
<b>Flexural strength (MPa)</b>	UN 14125	20 – 40
<b>Maximum deflection (mm)</b>	UN 14125	0.5 – 1.5
<b>Tensile modulus (MPa)</b>	UN 527	2 000 – 3 500
<b>Tensile strength (MPa)</b>	UN 527	20 – 40
<b>Elongation at break (mm)</b>	UN 527	0.5 – 1.5

## 6. STORAGE AND PACKAGING

- The product should be stored in a dry place at a temperature not exceeding 25°C.
- Its expiration date is 6 months under the conditions mentioned above.
- Existing containers are 1000 kg. For other quantities, please contact the Sales Department at Graphenano Composites.