

## VINILGRAPH 901 PLUS PREMIUM

V06 26/02/25

### 1. DESCRIPTION

Bisphenol A type epoxy vinyl ester resin with graphene, of medium viscosity and reactivity. It provides excellent corrosion resistance to a broad range of organic and inorganic acids, alkalis, oxidizing chemicals and salt solutions etc. It also provides very good mechanical strength such as tensile and flexural while incorporated with reinforcement such as glass fibre, carbon fibre, etc.

### 2. PROPERTIES

- **High mechanical properties.**
- **High chemical resistance.**
- **Excellent corrosion resistance.**
- **Improvement of thermal conductivities.**

### 3. APPLICATIONS

- Specially designed as a base resin reinforcement, such as glass fibre, carbon fibre, etc.
- Excellent intercoat adhesion and very low linear and volumetric shrinkage.
- The percentage of MEK peroxide to be added is between 0.6 % and 1 %, although it can be increased to 2 % to reduce the gel time.
- The application can be manual or by machine.
- May be used in pultrusion, hand lay - up, BMC and SMC processes.

### 4. TECHNICAL CHARACTERISTICS

<b>Appearance</b>	Dark liquid
<b>Specific Gravity</b>	1.4 – 1.5
<b>Gel time (25 °C)<sup>(1)</sup></b>	18 - 20 min
<b>Viscosity brookfield (SPL2V25, 25 °C)</b>	1 500 – 2 500 cPs

(1) 100/0.3 CO/0.6 PMEK Temperature: 25 °C

## 5. MECHANICAL CHARACTERISTICS

<b>Flexural modulus</b>	8 000 - 9 500 MPa
<b>Flexural strength</b>	45 - 65 MPa
<b>Maximum deflection (dL)</b>	0.55 - 0.75 mm
<b>Tensile modulus</b>	5 500 - 6 500 MPa
<b>Tensile strength</b>	30 - 50 MPa
<b>Elongation at break</b>	0.5 - 0.7 %

*Mechanical properties of the catalysed resin*

<b>Flexural modulus</b>	~ 155 000 MPa
<b>Flexural strength</b>	~ 882 MPa
<b>Maximum deflection (dL)</b>	~ 3.10 mm
<b>Tensile modulus</b>	~ 26 000 MPa
<b>Tensile strength</b>	~ 1 000 MPa
<b>Elongation at break</b>	~ 5 %

*Mechanical properties of carbon fibre reinforced resin (60%)*

<b>Flexural modulus</b>	~ 67 000 MPa
<b>Flexural strength</b>	~ 1 200 MPa
<b>Maximum deflection (dL)</b>	~ 10 mm
<b>Tensile modulus</b>	~ 22 000 MPa
<b>Tensile strength</b>	~ 800 MPa
<b>Elongation at break</b>	~ 6 %

*Mechanical properties of glass fibre reinforced resin (72%)*

## 6. STORAGE AND PACKAGING

- The product must be **stored in a dry place** at a temperature not exceeding **25 °C**.
- The expiration date is **6 months** under these conditions.
- In general, products will be supplied in **drum** format.
- For other quantities and/or packaging: **contact us**.