

**NEMpreg.UBIQ6540**

**HIGH QUALITY EPOXY RESIN PREPREG**

**DESCRIPTION**

The NEMpreg.UBIQ6540 is an advanced prepreg based on toughened epoxy resin system, specifically designed for energy efficient autoclave cycles.

**TYPICAL USE**

Aesthetic elements: automotive, sport and hobby, industrial



**FEATURES**

- long out life: up to 90 days at 20°C
- short curing cycle: 30 min at 120°C
- high drapability
- good surface quality
- optimum tack (may be adjusted on request)

**DEDICATED TECHNOLOGY**

autoclave

**OUT LIFE (20°C)**

90 days

**SHELF LIFE (-18°C)**

12 months (TBC)

**Tg (max.)**

140°C

**REINFORCEMENT**

carbon, aramid from 80gsm to 500gsm

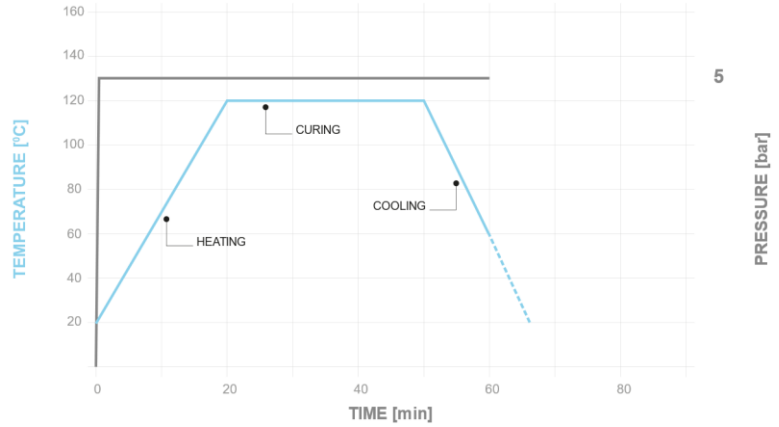
**NEAT RESIN PROPERTIES**

Resin system cured at 120°C for 60 min.

| PROPERTY          | UNIT | VALUE | TEST STANDARD |
|-------------------|------|-------|---------------|
| Tensile strength  | MPa  | 89    | ISO 527-4     |
| Tensile modulus   | GPa  | 3.0   | ISO 527-4     |
| Flexural strength | MPa  | 140   | ISO 178       |
| Flexural modulus  | GPa  | 3.1   | ISO 178       |
| Tg (DMA)          | °C   | 145   | ISO 6721-1    |

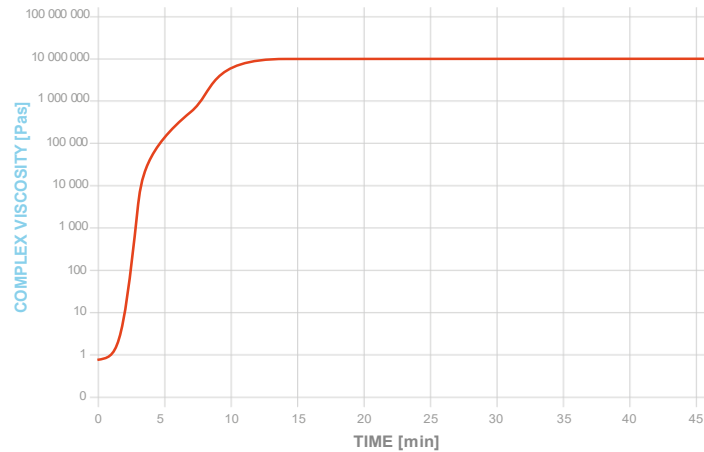
## RECOMMENDED CURING CYCLE

1. Apply 5 bar of pressure
2. Heat at 0.1- 5°C/min up to 120°C
3. Hold at 120°C for 30 minutes
4. Cool down to 60°C or below



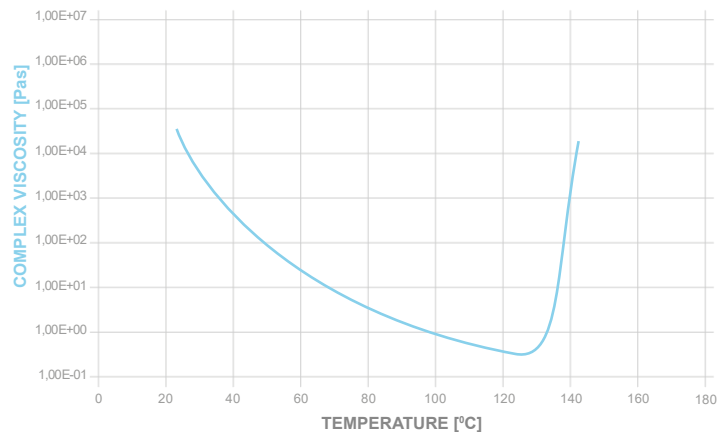
## ISOTHERMAL CURING

Resin viscosity profile conducted at 120°C.



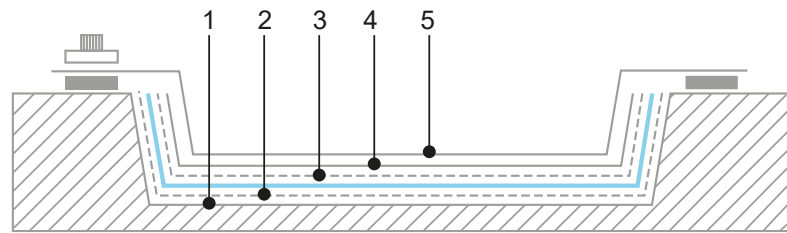
## DYNAMIC CURING

Resin viscosity profile conducted at 10°C/min.



## LAY-UP PROCEDURE FOR AUTOCLAVE

1. The mold surface must be covered with the release agent.
2. To prepare the surface for the bonding process, a layer of peel ply can be applied on the top of the lay-up (nylon peel ply is recommended).
3. The lay-up must be covered with release foil.
4. Put bleeders and feed strips of glass or peel ply on the top.
5. Finally, place a vacuum bag and seal it with butyl tape. Apply the vacuum to remove trapped air. Debulk the laminate for at least 15 to 30 minutes.



## STORAGE CONDITIONS

- Maintain low humidity to prevent moisture absorption (<50% is recommended).
- Keep the material in original sealed packaging until ready for usage. Reseal opened packages tightly to avoid exposure to air during storage.
- Handle the material with care to avoid physical damage or deformation. Store the materials in a flat, horizontal position to prevent creasing or bending, which can affect the integrity of the fibers and resin matrix.
- Store and handle at recommended temperature: 20°C up to 90 days / 12 months if frozen to -18°C (TBC).

## ATTENTION

The above information concerning our products is based on our present-day knowledge, research results and experiences are presented in good faith in accordance with the company's practices. The proposed procedures are considered to be commonly applied. However, any user should verify, if the delivered material is suitable for the intended application. This should take place according to current industrial standards and norms, including examinations of the final product. Neither the company nor its representatives shall be liable for any direct, indirect, punitive, incidental, special consequential damages, to property or life, whatsoever arising out of or connected with the use or misuse of the company's products.

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