

NEMpreg.ply6540

SNAP CURE EPOXY RESIN PREPREG

DESCRIPTION

NEMpreg.ply6540 is an advanced prepreg based on epoxy resin system. Suitable for the sport and hobby applications. Dedicated to the sandwich structures combined with different materials, e.g. wood, plastic or metal. Recommended for hot press molding.

TYPICAL USE

Sport and hobby elements:
skis, snowboards, kiteboards, etc.



SPORT & HOBBY

FEATURES

- snap cure prepreg (10 min. at 120°C)
- out life up to 21 days at 20°C
- high transparency after curing
- low tack
- high adhesion to wood, plastic and metal

DEDICATED TECHNOLOGY

hot press molding

OUT LIFE (20°C)

21 days

SHELF LIFE (7°C)

9 months

SHELF LIFE (-18°C)

12 months

T_g

130°C

REINFORCEMENT

glass from 25gsm to 900gsm

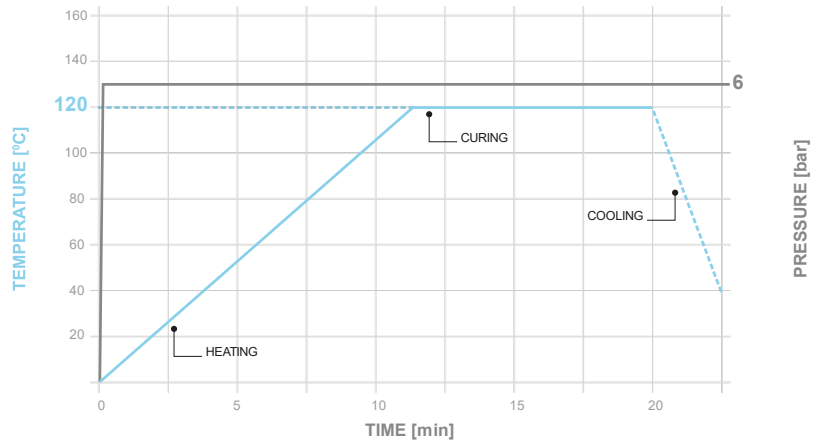
NEAT RESIN PROPERTIES

Resin system cured at 120°C for 10 min.

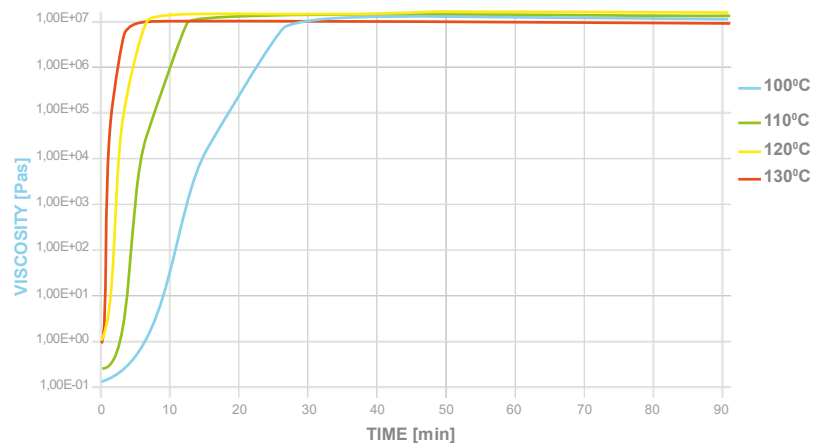
PROPERTY	UNIT	VALUE	TEST STANDARD
Tensile strength	MPa	85	ISO 527-4
Tensile modulus	GPa	3.3	ISO 527-4
Flexural strength	MPa	150	ISO 178
Flexural modulus	GPa	4.9	ISO 178
T _g (DMA)	°C	130	ISO 6721-1

RECOMMENDED CURING CYCLE

1. Apply 4-10 bar of pressure (6 bar is recommended)
2. Heat at 5-30°C/min up to 120°C
3. Hold at 120°C for 10 minutes
4. Cool down to 60°C or below

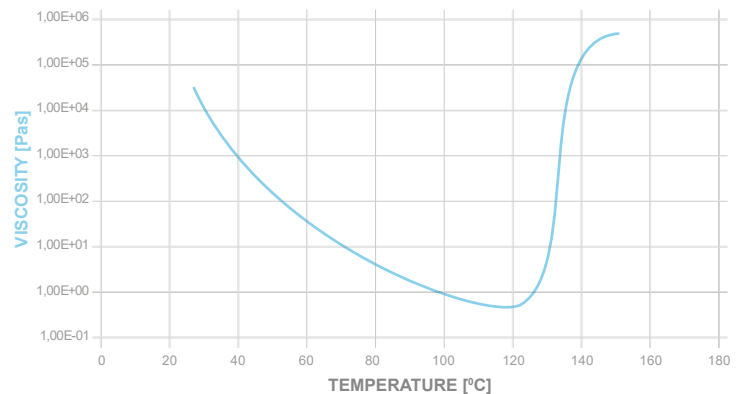


ISOTHERMAL CURING



DYNAMIC CURING

Resin viscosity profile conducted at 10°C/min.



MECHANICAL PROPERTIES

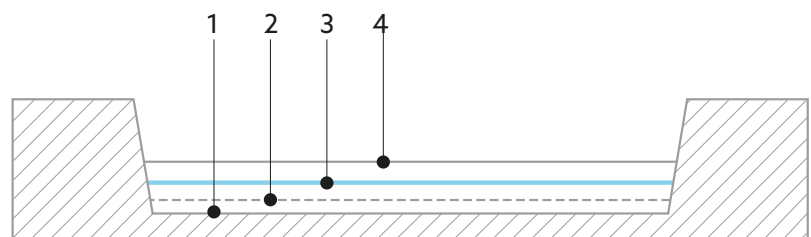
Laminates cured using hot press molding technique according to the cycle presented above.

PROPERTY	UNIT	DESCRIPTION		TEST STANDARD
Fiber type	N/A	glass	glass	N/A
Area weight	g/m ²	552	843	N/A
Weave	N/A	BX± 0/90	BX± 0/90	N/A
Resin content	%	40	40	N/A
Tensile strength	MPa	900	850	ISO 527-4
Tensile modulus	GPa	37	36	ISO 527-4
Flexural strength	MPa	1500	1100	ISO 14125
Flexural modulus	GPa	45	31	ISO 14125
Tg (DMA)	°C	130	130	ISO 6721-1

APPLICATION

Be aware that product has only one covering foil. On the opposite side, the additional fleece is applied to reach the proper adhesion. That means that prepreg should be applied on the substrate using a side without foil.

1. Mold
2. Prepreg
3. Additional fleece
4. Substrate (e.g. wood, plastic, metal)



STORAGE CONDITIONS

Keep the NEMpreg in the original bag at operating temperature before unpacking. NEMpreg can be stored for 21 days at 20°C, 9 months at 7°C, or 12 months at -18°C. After removal from refrigerator storage, prepreg should be allowed to reach room temperature before opening to prevent water condensation. When not in use, NEMpreg must be covered by protective foil to prevent the inner structure from humidity. If the moisture level is too high, it can result in superficial and internal defects in the finished product.

ATTENTION

The above information concerning our products is based on our present-day knowledge, research results and experiences and 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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