

LEO 1608

Introduction

LEO 1608 is a semi-solid resin film. It is designed either for RFI process to manufacture composite parts or for being fused with carbon or glass fabrics or UD tapes to produce prepregs.

Owing to readily integrated nanochemicals, LEO 1608 semi-solid resin film ensures excellent damage tolerance such as toughness, compressive strength, impact, fatigue and crack growth resistance. After curing, the material is characterized by a Tg of 120°C (244°F).

LEO 1608 semi-solid resin film is the top quality solution to:

- DIRECTLY ACCESS TO NANO-CHEMICAL BENEFITS for structural improvement
- BENEFIT FROM CERTIFIED PERFORMANCE due to optimum nanoformulation
- EASILY MANUFACTURE COMPOSITE by fast stacking of RESIN FILM onto fibers
- AVOID NANOPARTICLES HANDLING and integration issues (EHS)
- AVOID SENSITIVE MIXING of Nanofilled Components
- AVOID HEAVY CLEANING of production equipments
- COMPLY WITH ENVIRONMENTAL CONCERNS by limiting waste disposal

Features

- × Sporting Goods,
- ×

Consult Nanoledge for other grades designed for Aeronautic, Marine and Wind Energy.



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Applications

PREPREG PRODUCERS: manufacture right-the-way innovative prepreg by using your conventional hot roller impregnator with the LEO 1608 semi-solid resin film.

FABRICS WEAVERS: get access to new business opportunities by fusing the LEO 1608 semi-solid resin film onto woven fabrics and offer full solutions to your customers.

PARTS MANUFACTURERS: take benefit from the LEO 1608 semi-solid resin film process to develop new generations of composite materials.

Typical handling properties

<i>Property</i>	<i>Unit</i>	<i>Value</i>
Density	g/m ²	40 to 400
Color		black
Physical form		semi-solid
Tack @ 20°C (66°F)		very low

Typical cured properties

<i>Property</i>	<i>Test method</i>	<i>Unit</i>	<i>Value</i>
Tg	ISO 11357	°C (°F)	120 (244)
Notched Izod Impact Resistance	ISO 180	kJ/m ²	8
Flexural modulus	ISO 178	MPa	2700
Flexural ultimate strength	ISO 178	MPa	120

Processing

LEO 1608 semi-solid resin film has a good drapeability and a very low tack at 20°C. It is thereby very easy to use for composite part manufacturing.

LEO 1608 semi-solid resin film can be fused onto the fabric or UD tape at a temperature ranging from 60 to 70°C (140 to 158°C).

Full performance of the LEO 1608 semi-solid resin film will be reached after a 20 minutes post-cure at 130°C (266°F).



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Packaging and Storage

LEO 1608 semi-solid resin film is available in rollers of various widths: 60, 122, 127 and 129.5 cm (24, 48, 50 and 51"). Rollers length varies from 50 to 200 m depending on the film density.

LEO 1608 system can be stored at room temperature in a dry place.

LEO 1608 system shelf-life: 6 months at room temperature.

For more information on packaging and storage, consult Nanoleedge.

SAFETY & HANDLING

These products are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. Exposure to these materials should be minimized and avoided. **None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet (MSDS) for these and all other products being used are understood by all persons who will work with them.** Questions and requests for information on Nanoleedge Specialty products should be directed to NANOLEDGE.

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