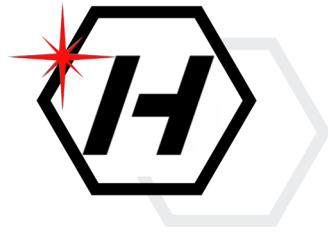


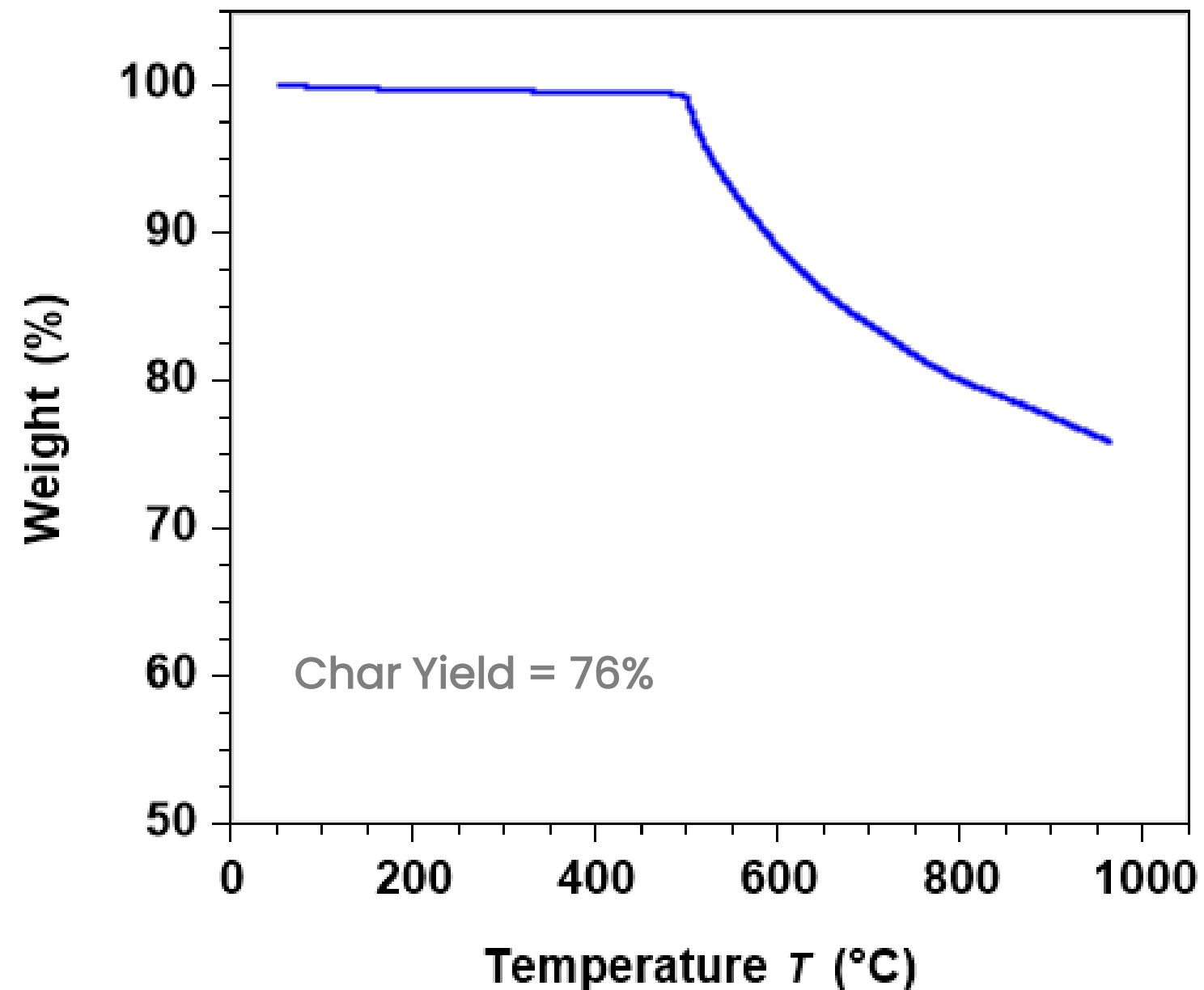


OMNI-PN™
Technical Data Sheet

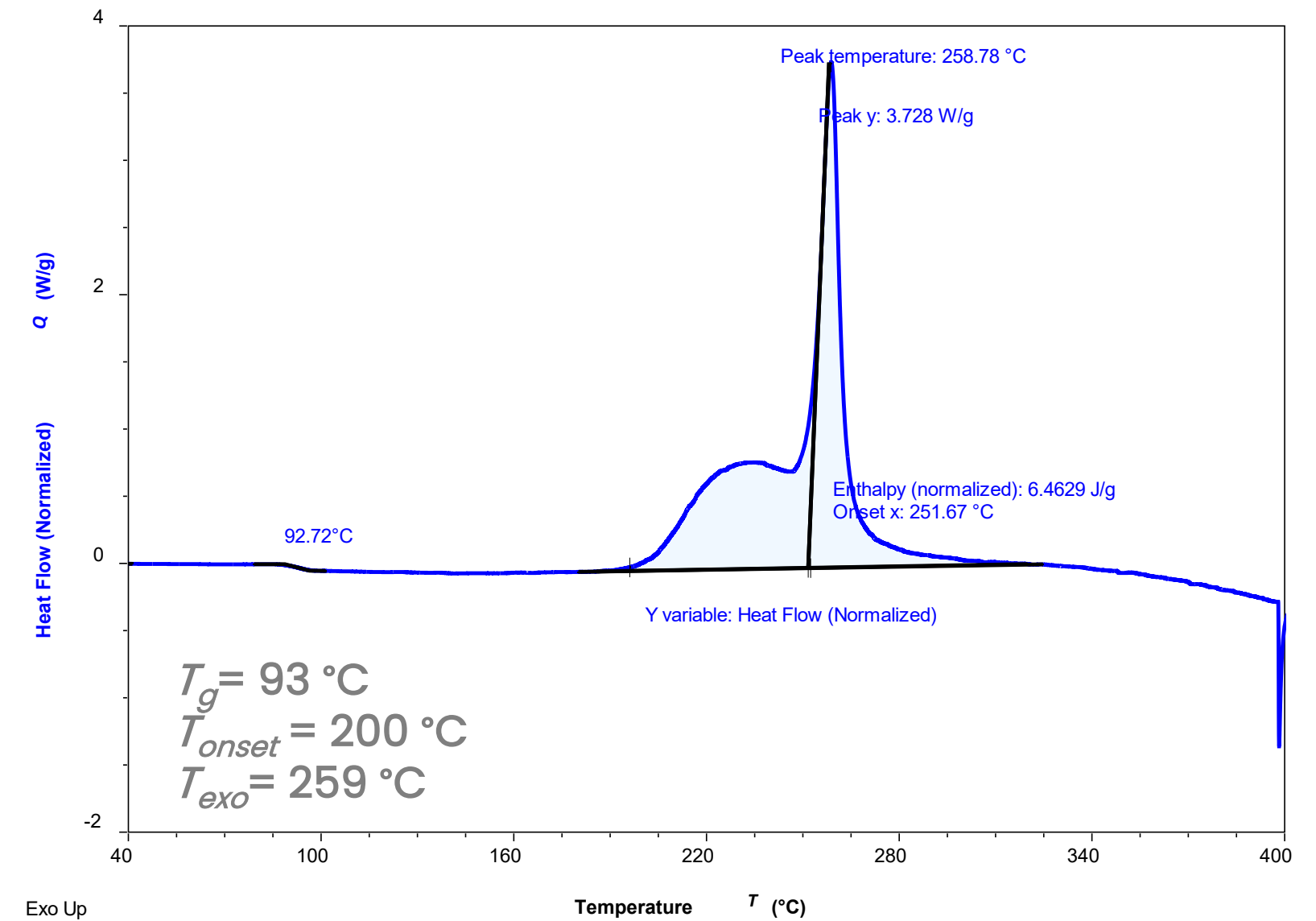
Thermal Processing Properties – TGA and DSC



TGA 10 °C/min → 1000 °C, (N₂-25 ml/min)



DSC 10 °C/min → 400 °C, (N₂-50 ml/min)



Thermogravimetric Analysis

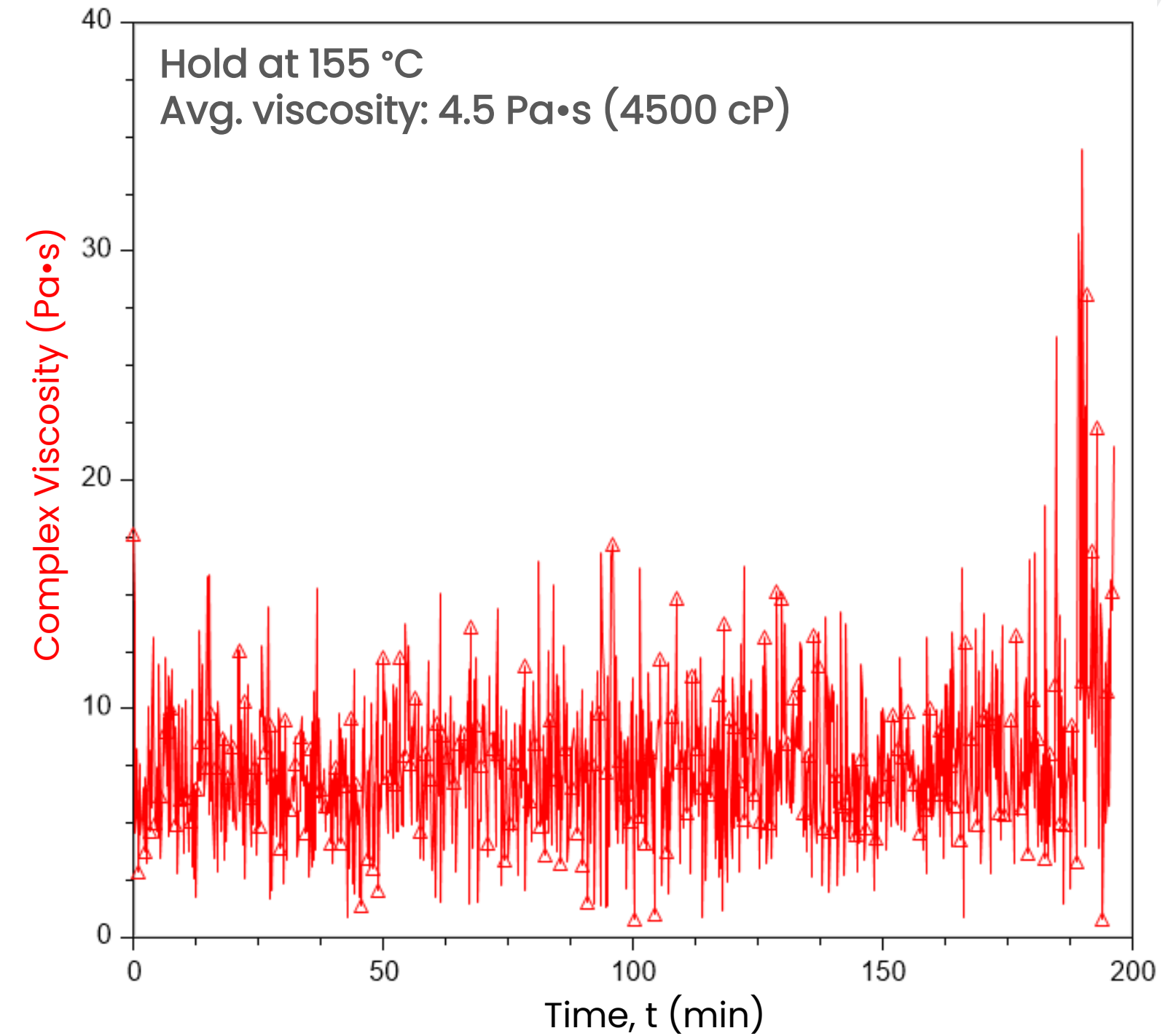
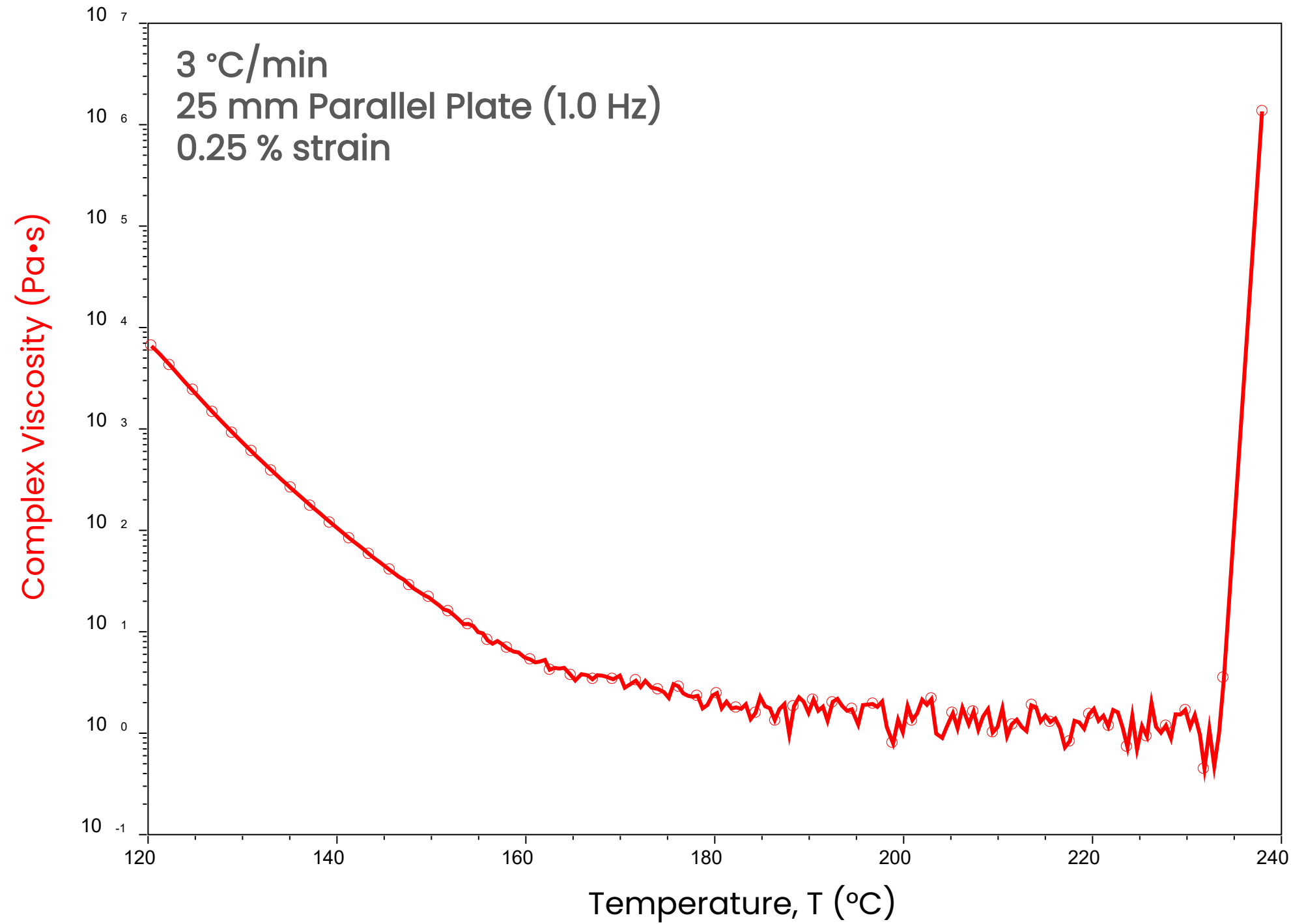
- The PN-H100 thermoset obtained after 300–400 °C has a **char yield of 76%**.
- 0.5 % mass loss at 400 °C

DSC

- A softening point is observed at 93 °C
- The onset of polymerization is observed at 200 °C.

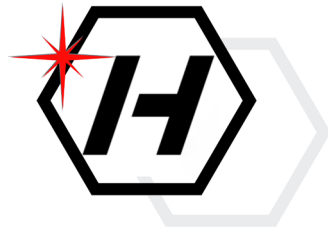


Melt State Properties – Rheology



Rheology

- Vacuum bag process: recommended processing at 140–155 °C and heating to 175–195 °C to cure.
- Infusion process: recommended infusion at 175–185 °C, avg. viscosity of ~1.0–2.5 Pa·s. (1,000–2,500 cP).
- Very low risk of exotherm.



For Melt-Infusion

- Recommended infusion temperature is 175–185 °C.
- With compression lower temperatures can be utilized. At 155 °C, resin viscosity is <10,000 cP.
- We recommend holding at 185 °C for a minimum of 4 hours to ensure gelation. Part may then be removed from the mold for a free-standing post-cure.
- Recommended post-cure temperature is 375 °C for >4 h.

For R&D Use Only. These guidelines serve as a starting point. Users should expect to optimize processing conditions to achieve maximum material performance within their specific equipment.

CONTACT US

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