



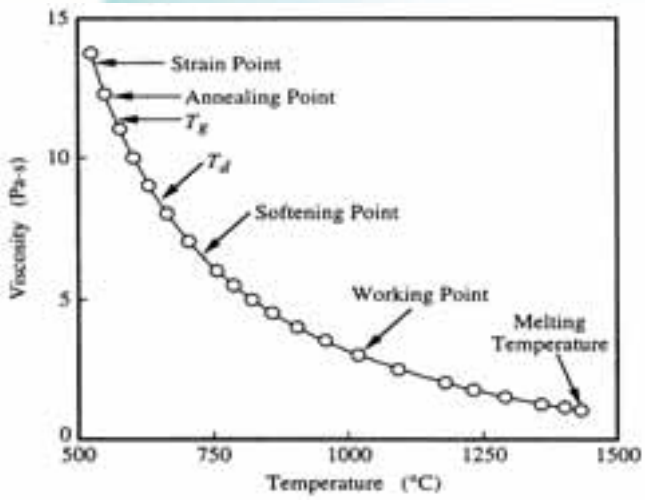
LITTLETON SOFTENING POINT

Glass Technology Services Ltd. is an independent laboratory providing a comprehensive range of services related to glass manufacture and use. Our services are backed by experienced, multi-disciplinary staff specialising in all aspects of glass technology.

The Littleton Softening Point is defined as the temperature at which the log (viscosity) is 6.6 Pa s.

Littleton softening point is a standard physical property measurement required by many customers. In many cases this represents a temperature which a glass should not reach when in service. If a customer were firing an enamel or frit onto a glass article, knowledge of the softening point of the article would be essential as an absolute maximum upper temperature limit for such processing.

An internationally-accepted standard method of measuring the Littleton Point is to use the fibre elongation method, as in standard ASTM C338. The temperature of the fibre is increased at a standard rate, and the elongation is measured with time. This enables measurement of the temperature corresponding to a log (viscosity) of 6.6 Pa s.



WHAT CAN MEASUREMENT OF THE LITTLETON SOFTENING POINT DO FOR ME?

- Important physical property fixed point relating to both manufacture and processing
- Can provide confidence in operating limits of downstream manufacturing processes
- Allows comparison of the softening points of different glasses without the need for a full viscosity curve
- GTS expertise and interpretation of this information
- Rapid and inexpensive service

RELATED SERVICES:

- Dilatometry - For thermal expansion, glass transition values
- Differential Thermal Analysis (DTA) - For batch reactions, phase changes, glass transition values
- Liquidus Temperature - For crystallisation behaviour of glasses and ceramics
- High Temperature Viscosity - For measurement of the viscosity-temperature curve
- High Temperature Electrical Measurements – For high temperature resistivity

If you would like to know more about these, our other services, or any other aspect of glass technology please contact us.

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