

Pressure Gauge Technical Brief

Glycerin/Water Case Fills

Mixing water with Glycerin lowers the freezing point of the mixture below that of either pure water (0°C) or pure glycerin (17°C). Please note that although pure glycerin freezes at 17°C, it will typically supercool at temperatures below this, and become very thick instead of freezing.

If trying to achieve acceptable performance at low temperatures an ideal mixture of glycerin/water is between 60/40 and 70/30, as can be seen in the graph below. In this range, the mixture will perform in a pressure gauge down to a temperature of -40°C (-40°F).

Reotemp offers a glycerin/water gauge fill of 65% / 35%, which will perform a dampening function without freezing, down to a temperature of -40°C, although a viscosity of approximately 1500 cP should be anticipated at -40°C.

