PVC and Thermoplastic Temperature / Pressure Chart

Effects of Elevated Temperatures on PVC / Thermoplastic Hose and Tubing

Thermoplastic hose and tubing achieve their optimum physical properties at room temperature, 68°F (20°C). As thermoplastic materials are exposed to increased ambient temperatures, they soften and their physical properties change. For hose and tubing, heat sharply reduces the available working pressure and coupling retention. The charts below illustrate this effect. In all cases, test the product in a controlled, secure and safe environment, and consider all operating conditions prior to use.



Example from the Fahrenheit Chart If Working Pressure at 68°F is 200 PSI, then the WP at 110°F is 200 x 50%, or 100 PSI.



Example from the Celsius Chart

If Working Pressure at 20°C is 14 bar, then the WP at 50°C is 14 x 40%, or 5.6 bar.

