§ 192.121 Design of plastic pipe.

Subject to the limitations of § 192.123, the design pressure for plastic pipe is determined by either of the following formulas:

\[
P = 2S \frac{t}{(D - t)} (DF)
\]

\[
P = \frac{2S}{(SDR - 1)} (DF)
\]

Where:

- \( P \) = Design pressure, gauge, psig (kPa).
- \( S \) = For thermoplastic pipe, the HDB is determined in accordance with the listed specification at a temperature equal to 73 °F (23 °C), 100 °F (38 °C), 120 °F (49 °C), or 140 °F (60 °C). In the absence of an HDB established at the specified temperature, the HDB of a higher temperature may be used in determining a design pressure rating at the specified temperature by arithmetic interpolation using the procedure in Part D.2 of PPI TR–3–2008, *HDB/PDB/SDB/MRS Policies* (incorporated by reference, see §192.7). For reinforced thermosetting plastic pipe, 11,000 psig (75,842 kPa). [Note: Arithmetic interpolation is not allowed for PA–11 pipe.]
- \( t \) = Specified wall thickness, inches (mm).
- \( D \) = Specified outside diameter, inches (mm).
- \( SDR \) = Standard dimension ratio, the ratio of the average specified outside diameter to the minimum specified wall thickness, corresponding to a value from a common numbering system that was derived from the American National Standards Institute preferred number series 10.