

For N_{re} less than 3,162:

$$Q_{IV} = 0.0060639 \left[\frac{\mu}{C^{0.4242}} \right] \left[\frac{P_s M_w}{T_s} \right]^{-0.5759} \left[\frac{1}{D_{50}} \right]^{0.8481} \quad (\text{Eq. 8})$$

For N_{re} greater than 3,162:

$$Q_{IV} = 0.007657 \left[\frac{\mu}{C^{0.6205}} \right] \left[\frac{P_s M_w}{T_s} \right]^{-0.3795} \left[\frac{1}{D_{50}} \right]^{0.1241} \quad (\text{Eq. 9})$$