

$$k_{ss} = G_1 \left(\frac{0.4}{\ln\left(\frac{308}{K_{ss}}\right)} \right)^2 + F$$

$$\boxed{\frac{\partial k_{ss}}{\partial F} = 1}$$

$$\begin{aligned} \frac{\partial k_{ss}}{\partial G_1} &= \left(\frac{0.4}{\ln\left(\frac{308}{K_{ss}}\right)} \right)^2 + \frac{2(0.4)^2 G_1}{\left(\ln\left(\frac{308}{K_{ss}}\right)\right)^3} \left(\frac{K_{ss}}{308} \right) \left(\frac{+308}{K_{ss}^2} \right) \frac{\partial k_{ss}}{\partial G_1} \\ &= (\cdot)^2 + \frac{2(0.4)^2 G_1}{K_{ss} \left(\ln\left(\frac{308}{K_{ss}}\right) \right)^3} \frac{\partial k_{ss}}{\partial G_1} \end{aligned}$$

$$\Rightarrow \boxed{\frac{\partial k_{ss}}{\partial G_1} = \left(\frac{0.4}{\ln\left(\frac{308}{K_{ss}}\right)} \right)^2 \left[1 - \frac{2(0.4)^2 G_1}{K_{ss} \left(\ln\left(\frac{308}{K_{ss}}\right) \right)^3} \right]^{-1}}$$

$$\boxed{\frac{\partial k_{ss}}{\partial \delta} = \left(\frac{0.4}{\ln\left(\frac{308}{K_{ss}}\right)} \right)^2 \left[1 + \frac{2(0.4)^2 G_1 \delta}{\left(\ln\left(\frac{308}{K_{ss}}\right) \right)^3} \right]^{-1}}$$

$$\delta k_{ss} = \frac{\partial k_{ss}}{\partial G_1} \delta G_1 + \frac{\partial k_{ss}}{\partial F} \delta F + \frac{\partial k_{ss}}{\partial \delta} \delta \delta.$$