$$\tau_{xx} = 2\mu\left(\frac{\partial v_x}{\partial x}\right) + [(\kappa - \tfrac{2}{3}\mu)\nabla \cdot \mathbf{v}]$$

$$\tau_{yy} = 2\mu\left(\frac{\partial v_y}{\partial y}\right) + [(\kappa - \tfrac{2}{3}\mu)\nabla \cdot \mathbf{v}]$$

$$\tau_{zz} = 2\mu\left(\frac{\partial v_z}{\partial z}\right) + [(\kappa - \tfrac{2}{3}\mu)\nabla \cdot \mathbf{v}]$$

$$\tau_{xy} = \tau_{yx} = \mu\left(\frac{\partial v_x}{\partial y} + \frac{\partial v_y}{\partial x}\right)$$

$$\tau_{yz} = \tau_{zy} = \mu\left(\frac{\partial v_y}{\partial z} + \frac{\partial v_z}{\partial y}\right)$$

$$\tau_{zx} = \tau_{xz} = \mu\left(\frac{\partial v_z}{\partial x} + \frac{\partial v_x}{\partial z}\right)$$

$$\nabla \cdot \mathbf{v} = \frac{\partial v_x}{\partial x} + \frac{\partial v_y}{\partial y} + \frac{\partial v_z}{\partial z}$$