$$0 \leq f_{j}(\mathcal{Z}, \mathbf{k}) \leq 1$$

$$| \mathbf{Enzyme} \rangle \qquad \mathbf{P} \qquad \mathbf{OR} \quad v = 1 - \max \left\{ f_{1}(\mathcal{Z}, \mathbf{k}), f_{2}(\mathcal{Z}, \mathbf{k}), \dots, f_{N}(\mathcal{Z}, \mathbf{k}) \right\}$$

$$| \mathbf{Enzyme} \rangle \qquad \mathbf{P} \qquad \mathbf{OR} \quad v = \max \left\{ f_{1}(\mathcal{Z}, \mathbf{k}), f_{2}(\mathcal{Z}, \mathbf{k}), \dots, f_{N}(\mathcal{Z}, \mathbf{k}) \right\}$$

$$| \mathbf{Enzyme} \rangle \qquad \mathbf{P} \qquad \mathbf{AND} \quad v = \min \left\{ u, d \right\}$$

$$| u = \max_{f^{+}} \left\{ f_{1}(\mathcal{Z}, \mathbf{k}), f_{2}(\mathcal{Z}, \mathbf{k}), \dots, f_{U}(\mathcal{Z}, \mathbf{k}) \right\}$$

$$| d = 1 - \max_{f^{-}} \left\{ f_{1}(\mathcal{Z}, \mathbf{k}), f_{2}(\mathcal{Z}, \mathbf{k}), \dots, f_{D}(\mathcal{Z}, \mathbf{k}) \right\}$$