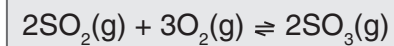


- Indicates ratio of products to reactants at equilibrium.
- Only a number
- Large  $K_c$  value: many products in relation to reactants, therefore economical
- Influenced only by temperature.

$$K_c = \frac{[\text{products}]}{[\text{reactants}]}$$

- Only substances: (g) and (aq) in expression



$$K_c = \frac{[\text{SO}_3]^2}{[\text{SO}_2]^2[\text{O}_2]^3}$$

## EQUILIBRIUM CONSTANT

### Example to calculate $K_c$ value:

Balanced reaction equation	$2\text{SO}_2(\text{g})$	+	$3\text{O}_2(\text{g})$	$\rightleftharpoons$	$2\text{SO}_3(\text{g})$
Initial quantity (mol)					
Quantity used or produced (mol)					
Final quantity at equilibrium (mol)					
Final concentration at equilibrium ( $\text{mol} \cdot \text{dm}^{-3}$ ) $c = n/v$					