

Entropy

Chemistry

What entropy measures, and what increases it.

Changes that increase entropy.

Change	ΔS
Solid $\rightarrow$ liquid $\rightarrow$ gas	Increases
Fewer moles $\rightarrow$ more moles of gas	Increases
Dissolving a solid	Usually increases
Increasing temperature	Increases
Gas $\rightarrow$ liquid $\rightarrow$ solid	Decreases

The second law: total entropy of the universe increases in any spontaneous process. Local decreases are paid for elsewhere.