Entropy substance models

SUBSTANCE MODELS FOR ENTROPY

WE ALREADY KNOW:

IDEAL GASES	INCOMPRESSIBLE SUBSTANCES
$P V = m R T$ $P = \rho R T$ etc.	$\rho = CONST$
$u_2 - u_1 =$ $h_2 - h_1 =$	$u_2 - u_1 =$ $h_2 - h_1 =$ $=$

AND NOW FOR ENTROPY!

$s_2 - s_1 =$ $s_2 - s_1 =$

 AND/OR

$s_2 - s_1 = c_p \ln (T_2 / T_1) - R \ln (P_2 / P_1)$

NOTES: • ASSUMED _____ _____ _____

 • NOTE DIFFERENCES IN THE TWO Δs RELATIONS
 FOR IDEAL GASES

 • MUST USE _____ TEMPERATURE IN
 Δs RELATIONS.