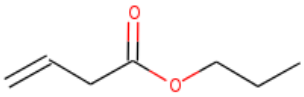
3-Butenoic acid, propyl ester

Other names: Propyl 3-butenoate.
InChI: InChI=1S/C7H12O2/c1-3-5-7(8)9-6-4-2/h3H,1,4-6H2,2H3
InChI Key: JUKZMMDUYUDTMG-UHFFFAOYSA-N
Formula: C7H12O2
SMILES: C=CCC(=O)OCCC
Molecular Weight: 128.17



Physical Properties

Property	Value	Unit	Source
$\Delta_f G°$	-138.02	kJ/mol	Joback Method
$\Delta_f H°_{gas}$	-307.18	kJ/mol	Joback Method
$\Delta_{fus} H°$	15.39	kJ/mol	Joback Method
$\Delta_{vap} H°$	39.66	kJ/mol	Joback Method
$logP_{oct/wat}$	1.52		Crippen Method
P_c	3079.57	kPa	Joback Method
T_{boil}	432.53	K	Joback Method
T_c	612.55	K	Joback Method
T_{fus}	239.05	K	Joback Method
V_c	0.43	m^3/kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	222.85	J/mol×K	432.53	Joback Method
η	0.00	Pa×s	432.53	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
NIST Webbook: http://webbook.nist.gov/cgi/inchi/InChI=1S/C7H12O2/c1-3-5-7(8)9-6-4-2/h3H,1,4-6H2,2H3
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

$\mathbf{C_{p,gas}}$: Ideal gas heat capacity (J/mol×K).
η: Dynamic viscosity (Pa×s).
$\Delta_f\mathbf{G°}$: Standard Gibbs free energy of formation (kJ/mol).
$\Delta_f\mathbf{H°_{gas}}$: Enthalpy of formation at standard conditions (kJ/mol).
$\Delta_{fus}\mathbf{H°}$: Enthalpy of fusion at standard conditions (kJ/mol).
$\Delta_{vap}\mathbf{H°}$: Enthalpy of vaporization at standard conditions (kJ/mol).
$\boldsymbol{log}\mathbf{P_{oct/wat}}$: Octanol/Water partition coefficient .
$\mathbf{P_c}$: Critical Pressure (kPa).
$\mathbf{T_{boil}}$: Normal Boiling Point Temperature (K).
$\mathbf{T_c}$: Critical Temperature (K).
$\mathbf{T_{fus}}$: Normal melting (fusion) point (K).
$\mathbf{V_c}$: Critical Volume (m^3/kg-mol).