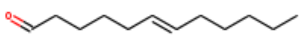
6-dodecenal, E

Other names: (E)-6-Dodecenal.
InChI: InChI=1S/C12H22O/c1-2-3-4-5-6-7-8-9-10-11-12-13/h6-7,12H,2-5,8-11H2,1H3/b7-6+
InChI Key: RKSXBPZEKYUCII-VOTSOKGWSA-N
Formula: C12H22O
SMILES: CCCCCC=CCCCCC=O
Molecular Weight: 182.30



Physical Properties

Property	Value	Unit	Source
$\Delta_f G°$	30.86	kJ/mol	Joback Method
$\Delta_f H°_{gas}$	-259.37	kJ/mol	Joback Method
$\Delta_{fus} H°$	29.33	kJ/mol	Joback Method
$\Delta_{vap} H°$	48.98	kJ/mol	Joback Method
$logP_{oct/wat}$	3.88		Crippen Method
P_c	1985.89	kPa	Joback Method
T_{boil}	526.78	K	Joback Method
T_c	700.00	K	Joback Method
T_{fus}	261.92	K	Joback Method
V_c	0.70	m^3/kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	418.84	J/mol×K	526.78	Joback Method
η	0.00	Pa×s	526.78	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
NIST Webbook: http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H22O/c1-2-3-4-5-6-7-8-9-10-11-12-13/h6-7,12H,2-5,8-11H2,1H3/b7-6+
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).