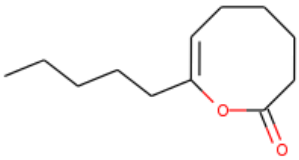
(Z)-6-Dodecene-7-lactone

InChI: InChI=1S/C12H20O2/c1-2-3-5-8-11-9-6-4-7-10-12(13)14-11/h9H,2-8,10H2,1H3/b11-9-
InChI Key: KBMKBYARCSCTRK-LUAWRHEFSA-N
Formula: C12H20O2
SMILES: CCCCCC1=CCCCCC(=O)O1
Molecular Weight: 196.29



Physical Properties

Property	Value	Unit	Source
$\Delta_f G°$	-130.26	kJ/mol	Joback Method
$\Delta_f H°_{gas}$	-452.06	kJ/mol	Joback Method
$\Delta_{fus} H°$	21.72	kJ/mol	Joback Method
$\Delta_{vap} H°$	53.10	kJ/mol	Joback Method
$logP_{oct/wat}$	3.57		Crippen Method
P_c	2414.74	kPa	Joback Method
T_{boil}	605.63	K	Joback Method
T_c	827.95	K	Joback Method
T_{fus}	337.65	K	Joback Method
V_c	0.64	m^3/kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	453.29	J/mol×K	605.63	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method

NIST Webbook: http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H20O2/c1-2-3-5-8-11-9-6-4-7-10-12(13)14-11/h9H,2-8,10H2,1H3/b11-9-

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

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