

1,3-Dioxane, 2-ethyl-4-pentyl, 2S,4R

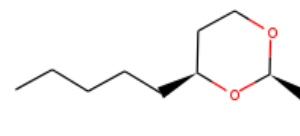
InChI: InChI=1S/C11H22O2/c1-3-5-6-7-10-8-9-12-11(4-2)13-10/h10-11H,3-9H2,1-2H3/t10-,11+/m0/s1

InChI Key: UCGYQTHBPZXKHC-WDEREUQCSA-N

Formula: C11H22O2

SMILES: CCCCC1CCOC(CC)O1

Molecular Weight: 186.29



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-113.76	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-500.39	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	33.11	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	49.22	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	3.11		Crippen Method
P_c	2224.99	kPa	Joback Method
T_{boil}	519.86	K	Joback Method
T_c	712.81	K	Joback Method
T_{fus}	270.01	K	Joback Method
V_c	0.63	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	416.76	J/mol×K	519.86	Joback Method
η	0.00	Paxs	519.86	Joback Method

Sources

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

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C11H22O2/c1-3-5-6-7-10-8-9-12-11\(4-2\)13-10/h10-11H,3-9H2,1-2H3/t10-,11+/m0/s1](http://webbook.nist.gov/cgi/inchi/InChI=1S/C11H22O2/c1-3-5-6-7-10-8-9-12-11(4-2)13-10/h10-11H,3-9H2,1-2H3/t10-,11+/m0/s1)

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Legend

$C_{p,gas}$: Ideal gas heat capacity (J/molxK).

η : Dynamic viscosity (Pa \times s).

$\Delta_f G^\circ$: Standard Gibbs free energy of formation (kJ/mol).

$\Delta_f H^\circ_{gas}$: Enthalpy of formation at standard conditions (kJ/mol).

$\Delta_{fus} H^\circ$: Enthalpy of fusion at standard conditions (kJ/mol).

$\Delta_{vap} H^\circ$: Enthalpy of vaporization at standard conditions (kJ/mol).

$logP_{oct/wat}$: 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 (m³/kg-mol).

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