

exo-Norbornyl alcohol

Other names: 2-Norbornanol, exo-; 2-exo-Norbornanol; 2-exo-Norborneol; Bicyclo[2.2.1]heptan-2-ol, (1R,2R,4S)-rel-; Bicyclo[2.2.1]heptan-2-ol, exo-; NSC 167460; exo-2-Norbornanol; exo-2-Norborneol; exo-2-Norbornyl alcohol; exo-Bicyclo[2.2.1]heptan-2-ol; exo-Norbornanol; exo-Norborneol.

InChI:

InChI=1S/C7H12O/c8-7-4-5-1-2-6(7)3-5/h5-8H,1-4H2/t5?,6?,7-/m1/s1

InChI Key: ZQTYQMYDIHMKQB-KPGICGJXSA-N

Formula: C7H12O

SMILES: OC1CC2CCC1C2

Molecular Weight: 112.17

CAS: 497-37-0



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-27.07	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-220.94	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{liquid}}$	-279.00 ± 2.00	kJ/mol	NIST Webbook
$\Delta_f H^\circ_{\text{solid}}$	-281.00 ± 2.00	kJ/mol	NIST Webbook
$\Delta_{\text{fus}} H^\circ$	13.21	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	52.50	kJ/mol	NIST Webbook
$\log P_{\text{oct/wat}}$	1.17		Crippen Method
P_c	4183.90	kPa	Joback Method
T_{boil}	449.70	K	NIST Webbook
T_c	657.72	K	Joback Method
T_{fus}	257.59	K	Joback Method
V_c	0.35	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	217.81	J/mol×K	464.82	Joback Method
η	0.00	Paxs	464.82	Joback Method

Sources

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

NIST Webbook:

[http://webbook.nist.gov/cgi/inchi/InChI=1S/C7H12O/c8-7-4-5-1-2-6\(7\)3-5/h5-8H,1-4H2/t5?,6?,7-/m1/s1](http://webbook.nist.gov/cgi/inchi/InChI=1S/C7H12O/c8-7-4-5-1-2-6(7)3-5/h5-8H,1-4H2/t5?,6?,7-/m1/s1)

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

Legend

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

η : Dynamic viscosity (Paxs).

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

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

$\Delta_f H^\circ_{liquid}$: Liquid phase enthalpy of formation at standard conditions (kJ/mol).

$\Delta_f H^\circ_{solid}$: Solid phase 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).

$\log P_{oct/wat}$: 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 (m³/kg-mol).

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