

4-Dimethylaminobenzhydrazide

Other names: 4-(N,N-Dimethylamino)benzhydrazide; 4-Dimethylaminobenzohydrazide; Benzoic acid, 4-(dimethylamino)-, hydrazide; p-(dimethylamino)benzohydrazide.

InChI: InChI=1S/C9H13N3O/c1-12(2)8-5-3-7(4-6-8)9(13)11-10/h3-6H,10H2,1-2H3,(H,11,13)

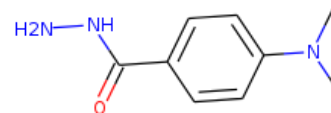
InChI Key: HITIGLAGJBMISF-UHFFFAOYSA-N

Formula: C9H13N3O

SMILES: CN(C)c1ccc(C(=O)NN)cc1

Molecular Weight: 179.22

CAS: 19353-92-5



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	265.38	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	38.18	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	27.63	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	64.43	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	0.356		Crippen Method
P_c	3740.80	kPa	Joback Method
T_{boil}	625.99	K	Joback Method
T_c	850.49	K	Joback Method
T_{fus}	448.45	K	Joback Method
V_c	0.519	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	369.09	J/mol×K	625.99	Joback Method

Sources

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

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C9H13N3O/c1-12\(2\)8-5-3-7\(4-6-8\)9\(13\)11-10/h3-6H,10H2,1-2H3,\(H,11,13\)](http://webbook.nist.gov/cgi/inchi/InChI=1S/C9H13N3O/c1-12(2)8-5-3-7(4-6-8)9(13)11-10/h3-6H,10H2,1-2H3,(H,11,13))

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

Legend

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

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

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

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

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

$\log P_{\text{oct/wat}}$: 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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