

# 2-Piperidinecarboxylic acid

<b>Other names:</b>	2-carboxypiperidine Acide pipecolique Acide piperidine-carboxylique-2 DL-2-piperidinecarboxylic acid Dihydrobaikiane Hexahydropicolinic acid Homoproline NSC 17125 Pipecolate Piperolinic acid pipecolic acid pipecolinic acid piperidine-2-carboxylic acid «alpha»-Pipecolinic acid
<b>Inchi:</b>	InChI=1S/C6H11NO2/c8-6(9)5-3-1-2-4-7-5/h5,7H,1-4H2,(H,8,9)
<b>InchiKey:</b>	HXEACLLIILLPRG-UHFFFAOYSA-N
<b>Formula:</b>	C6H11NO2
<b>SMILES:</b>	O=C(O)C1CCCCN1
<b>Mol. weight [g/mol]:</b>	129.16
<b>CAS:</b>	4043-87-2

## Physical Properties

Property code	Value	Unit	Source
gf	-153.94	kJ/mol	Joback Method
hf	-339.85	kJ/mol	Joback Method
hfus	18.41	kJ/mol	Joback Method
hvap	59.56	kJ/mol	Joback Method
log10ws	-0.63		Crippen Method
logp	0.213		Crippen Method
mcvol	101.960	ml/mol	McGowan Method
pc	5037.07	kPa	Joback Method
tb	550.83	K	Joback Method
tc	761.17	K	Joback Method
tf	380.54	K	Joback Method
vc	0.366	m <sup>3</sup> /kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	245.39	J/molxK	550.83	Joback Method
cpg	257.47	J/molxK	585.89	Joback Method
cpg	268.89	J/molxK	620.94	Joback Method
cpg	279.65	J/molxK	656.00	Joback Method
cpg	289.78	J/molxK	691.06	Joback Method
cpg	299.28	J/molxK	726.12	Joback Method
cpg	308.16	J/molxK	761.17	Joback Method

## Sources

NIST Webbook:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C4043872&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C4043872&amp;Units=SI</a>
Crippen Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
Crippen Method:	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
Density and Solubility of CO2 in Aqueous Solutions of (Potassium Carbonate + sarcosine) and (Potassium Carbonate + Pipecolic Acid):	<a href="https://www.doi.org/10.1021/je300782p">https://www.doi.org/10.1021/je300782p</a>
Joback Method:	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
McGowan Method:	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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