

Cyclopentanecarboxylic acid, 1-amino-

Other names:	Cycloleucine ACPC Cycloleucin NSC 1026 WR 14997 1-Aminocyclopentanecarboxylic acid 1-Amino-1-cyclopentanecarboxylic acid 1-Aminocyclopentane-1-carboxylic acid CB 1639 X 201 WR 14,997 1-Amino-1-carboxycyclopentane
Inchi:	InChI=1S/C6H11NO2/c7-6(5(8)9)3-1-2-4-6/h1-4,7H2,(H,8,9)
InchiKey:	NILQLFBWTXNUOE-UHFFFAOYSA-N
Formula:	C6H11NO2
SMILES:	NC1(C(=O)O)CCCC1
Mol. weight [g/mol]:	129.16
CAS:	52-52-8

Physical Properties

Property code	Value	Unit	Source
gf	-168.59	kJ/mol	Joback Method
hf	-322.47	kJ/mol	Joback Method
hfus	9.82	kJ/mol	Joback Method
hvap	62.12	kJ/mol	Joback Method
log10ws	-0.87		Crippen Method
logp	0.342		Crippen Method
mcvol	101.960	ml/mol	McGowan Method
pc	5430.51	kPa	Joback Method
tb	570.78	K	Joback Method
tc	786.56	K	Joback Method
tf	386.19	K	Joback Method
vc	0.364	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	258.74	J/mol×K	570.78	Joback Method
cpg	269.27	J/mol×K	606.74	Joback Method
cpg	279.10	J/mol×K	642.71	Joback Method
cpg	288.34	J/mol×K	678.67	Joback Method
cpg	297.10	J/mol×K	714.64	Joback Method
cpg	305.50	J/mol×K	750.60	Joback Method
cpg	313.65	J/mol×K	786.56	Joback Method
hsubt	123.30	kJ/mol	455.50	NIST Webbook
hsubt	123.00 ± 0.40	kJ/mol	455.00	NIST Webbook
hsubt	123.00 ± 4.00	kJ/mol	455.00	NIST Webbook

Sources

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C52528&Units=SI>

Crippen Method:

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

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Joback Method:

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

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hsubt:	Enthalpy of sublimation at a given temperature
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume

Latest version available from:

<https://www.cheméo.com/cid/42-766-5/Cyclopentanecarboxylic-acid-1-amino.pdf>

Generated by Cheméo on 2024-04-28 15:21:20.765794829 +0000 UTC m=+16606929.686372145.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.