2-Norbornaneacetic acid

Other names:	Bicyclo[2.2.1]heptane-2-acetic acid
	norborn-2-ylacetic acid
Inchi:	InChI=1S/C9H14O2/c10-9(11)5-8-4-6-1-2-7(8)3-6/h6-8H,1-5H2,(H,10,11)
InchiKey:	FYHBMPWRHCWNBC-UHFFFAOYSA-N
Formula:	C9H14O2
SMILES:	O=C(O)CC1CC2CCC1C2
Mol. weight [g/mol]:	154.21
CAS:	1007-01-8

Physical Properties

Property code	Value	Unit	Source
gf	-139.15	kJ/mol	Joback Method
hf	-374.80	kJ/mol	Joback Method
hfus	19.99	kJ/mol	Joback Method
hvap	58.74	kJ/mol	Joback Method
log10ws	-1.75		Crippen Method
logp	1.897		Crippen Method
mcvol	123.390	ml/mol	McGowan Method
pc	3564.27	kPa	Joback Method
tb	564.45	K	Joback Method
tc	761.50	K	Joback Method
tf	330.06	K	Joback Method
vc	0.469	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	328.44	J/mol×K	564.45	Joback Method
cpg	389.89	J/mol×K	728.66	Joback Method
cpg	379.08	J/mol×K	695.82	Joback Method
cpg	367.59	J/mol×K	662.97	Joback Method
cpg	355.35	J/mol×K	630.13	Joback Method
cpg	342.32	J/mol×K	597.29	Joback Method
cpg	400.05	J/mol×K	761.50	Joback Method

dvisc	0.0005192	Pa×s	564.45	Joback Method
dvisc	0.0006808	Pa×s	525.38	Joback Method
dvisc	0.0009325	Pa×s	486.32	Joback Method
dvisc	0.0013495	Pa×s	447.25	Joback Method
dvisc	0.0020959	Pa×s	408.19	Joback Method
dvisc	0.0035733	Pa×s	369.12	Joback Method
dvisc	0.0069120	Pa×s	330.06	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	380.70	K	0.40	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1007018&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
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
tbrp:	Boiling point at reduced pressure

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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