

2-Propenoic acid, 3-bicyclo[2.2.1]hept-5-en-2-yl-

Other names:	norborn-5-en-2-ylacrylic acid
Inchi:	InChI=1S/C10H12O2/c11-10(12)4-3-9-6-7-1-2-8(9)5-7/h1-4,7-9H,5-6H2,(H,11,12)/b4-3+
InchiKey:	PSQVRPSVCYLDTE-ONEGZZNKSA-N
Formula:	C10H12O2
SMILES:	O=C(O)C=CC1CC2C=CC1C2
Mol. weight [g/mol]:	164.20
CAS:	15222-64-7

Physical Properties

Property code	Value	Unit	Source
gf	-20.55	kJ/mol	Joback Method
hf	-220.44	kJ/mol	Joback Method
hfus	24.01	kJ/mol	Joback Method
hvap	61.22	kJ/mol	Joback Method
log10ws	-1.88		Crippen Method
logp	1.839		Crippen Method
mcvol	128.880	ml/mol	McGowan Method
pc	3530.46	kPa	Joback Method
tb	590.65	K	Joback Method
tc	794.91	K	Joback Method
tf	337.01	K	Joback Method
vc	0.491	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.43	J/mol×K	590.65	Joback Method
cpg	349.30	J/mol×K	624.69	Joback Method
cpg	361.31	J/mol×K	658.74	Joback Method
cpg	372.50	J/mol×K	692.78	Joback Method
cpg	382.97	J/mol×K	726.82	Joback Method
cpg	392.77	J/mol×K	760.87	Joback Method
cpg	401.98	J/mol×K	794.91	Joback Method
dvisc	0.0054698	Paxs	337.01	Joback Method

dvisc	0.0027930	Paxs	379.28	Joback Method
dvisc	0.0016320	Paxs	421.56	Joback Method
dvisc	0.0010517	Paxs	463.83	Joback Method
dvisc	0.0007294	Paxs	506.10	Joback Method
dvisc	0.0005352	Paxs	548.38	Joback Method
dvisc	0.0004105	Paxs	590.65	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	413.20	K	0.40	NIST Webbook
tbrp	413.00	K	0.33	NIST Webbook

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C15222647&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
mccvol:	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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