

Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, ethyl ester

Other names:	Ethyl 5-norbornene-2-carboxylate 2,5-Endomethylene-3-cyclohexene carboxylic acid, ethyl ester 5-Norbornene-2-carboxylic acid, ethyl ester
Inchi:	InChI=1S/C10H14O2/c1-2-12-10(11)9-6-7-3-4-8(9)5-7/h3-4,7-9H,2,5-6H2,1H3
InchiKey:	FCCGTJAGEHZPBF-UHFFFAOYSA-N
Formula:	C10H14O2
SMILES:	CCOC(=O)C1CC2C=CC1C2
Mol. weight [g/mol]:	166.22
CAS:	10138-32-6

Physical Properties

Property code	Value	Unit	Source
gf	-68.95	kJ/mol	Joback Method
hf	-317.65	kJ/mol	Joback Method
hfus	20.91	kJ/mol	Joback Method
hvap	46.99	kJ/mol	Joback Method
log10ws	-1.79		Crippen Method
logp	1.762		Crippen Method
mcvol	133.180	ml/mol	McGowan Method
pc	2940.89	kPa	Joback Method
tb	516.73	K	Joback Method
tc	724.41	K	Joback Method
tf	303.50	K	Joback Method
vc	0.510	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	323.62	J/molxK	516.73	Joback Method
cpg	339.84	J/molxK	551.34	Joback Method
cpg	355.09	J/molxK	585.96	Joback Method
cpg	369.42	J/molxK	620.57	Joback Method
cpg	382.88	J/molxK	655.18	Joback Method
cpg	395.51	J/molxK	689.79	Joback Method

cpg	407.35	J/mol×K	724.41	Joback Method
dvisc	0.0015357	Paxs	303.50	Joback Method
dvisc	0.0013107	Paxs	339.04	Joback Method
dvisc	0.0011529	Paxs	374.58	Joback Method
dvisc	0.0010369	Paxs	410.12	Joback Method
dvisc	0.0009484	Paxs	445.65	Joback Method
dvisc	0.0008790	Paxs	481.19	Joback Method
dvisc	0.0008232	Paxs	516.73	Joback Method

Sources

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=C10138326&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

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

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