

5-Norbornene-2-carboxylic acid,methyl ester

Inchi:	InChI=1S/C9H12O2/c1-11-9(10)8-5-6-2-3-7(8)4-6/h2-3,6-8H,4-5H2,1H3
InchiKey:	RMAZRAQKPTXZNL-UHFFFAOYSA-N
Formula:	C9H12O2
SMILES:	COC(=O)C1CC2C=CC1C2
Mol. weight [g/mol]:	152.19

Physical Properties

Property code	Value	Unit	Source
gf	-77.37	kJ/mol	Joback Method
hf	-297.01	kJ/mol	Joback Method
hfus	18.32	kJ/mol	Joback Method
hvap	44.77	kJ/mol	Joback Method
log10ws	-1.37		Crippen Method
logp	1.372		Crippen Method
mcvol	119.090	ml/mol	McGowan Method
pc	3272.78	kPa	Joback Method
tb	493.85	K	Joback Method
tc	704.70	K	Joback Method
tf	292.23	K	Joback Method
vc	0.455	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	278.17	J/molxK	493.85	Joback Method
cpg	293.60	J/molxK	528.99	Joback Method
cpg	308.08	J/molxK	564.13	Joback Method
cpg	321.67	J/molxK	599.27	Joback Method
cpg	334.41	J/molxK	634.41	Joback Method
cpg	346.34	J/molxK	669.56	Joback Method
cpg	357.51	J/molxK	704.70	Joback Method
dvisc	0.0013177	Paxs	292.23	Joback Method
dvisc	0.0011587	Paxs	325.83	Joback Method
dvisc	0.0010436	Paxs	359.44	Joback Method

dvisc	0.0009570	Paxs	393.04	Joback Method
dvisc	0.0008896	Paxs	426.64	Joback Method
dvisc	0.0008358	Paxs	460.25	Joback Method
dvisc	0.0007920	Paxs	493.85	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=B6006744&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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