5-Ethylidene-2-norbornene

Other names: Bicyclo[2.2.1]hept-2-ene, 5-ethylidene-
2-Norbornene, 5-ethylidene-
Ethylidenenorbornene
5-Ethylidenebicyclo[2.2.1]hept-2-ene
Ethylidene-2-norbornene
5-Ethylidenebicyclo[2.2.1]-2-heptene
5-ethylidene-8,9,10-trinorborn-2-ene

Inchi: InChI=1S/C9H12/c1-2-8-5-7-3-4-9(8)6-7/h2-4,7,9H,5-6H2,1H3/b8-2+

InchiKey: OJOWICOBYCXEKR-KRXBUXKQSA-N

Formula: C9H12

SMILES: CC=C1CC2C=CC1C2

Mol. weight [g/mol]: 120.19

CAS: 16219-75-3

Physical Properties

Property code	Value	Unit	Source
gf	209.72	kJ/mol	Joback Method
hf	44.16	kJ/mol	Joback Method
hfus	14.78	kJ/mol	Joback Method
hvap	36.70	kJ/mol	Joback Method
log10ws	-2.60		Crippen Method
logp	2.529		Crippen Method
mcvol	107.350	ml/mol	McGowan Method
pc	3333.53	kPa	Joback Method
rinpol	908.20		NIST Webbook
rinpol	921.20		NIST Webbook
rinpol	895.00		NIST Webbook
rinpol	904.00		NIST Webbook
rinpol	915.00		NIST Webbook
rinpol	911.00		NIST Webbook
rinpol	916.00		NIST Webbook
rinpol	910.00		NIST Webbook
rinpol	907.00		NIST Webbook
ripol	1106.80		NIST Webbook
ripol	1106.80		NIST Webbook
tb	419.20	K	NIST Webbook
tc	638.10	K	Joback Method

tf	234.67	K	Joback Method
vc	0.414	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	215.63	J/mol×K	428.87	Joback Method
cpg	284.20	J/mol×K	603.23	Joback Method
cpg	272.35	J/mol×K	568.36	Joback Method
cpg	259.64	J/mol×K	533.49	Joback Method
cpg	246.00	J/mol×K	498.61	Joback Method
cpg	231.35	J/mol×K	463.74	Joback Method
cpg	295.25	J/mol×K	638.10	Joback Method
dvisc	0.0004759	Pa×s	428.87	Joback Method
dvisc	0.0004881	Pa×s	396.50	Joback Method
dvisc	0.0005029	Pa×s	364.14	Joback Method
dvisc	0.0005211	Pa×s	331.77	Joback Method
dvisc	0.0005441	Pa×s	299.40	Joback Method
dvisc	0.0005742	Pa×s	267.04	Joback Method
dvisc	0.0006149	Pa×s	234.67	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=C16219753&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.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
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume