Heptadecane, 2,3-dimethyl-

Other names: 5-Methyloctadecane
Inchi: InChI=1S/C19H40/c1-5-6-7-8-9-10-11-12-13-14-15-16-17-19(4)18(2)3/h18-19H,5-17H2,1
InchiKey: LNMKTLJTVALPBD-UHFFFAOYSA-N
Formula: C19H40
SMILES: CCCCCCCCCCCCCCC(C)C(C)C
Mol. weight [g/mol]: 268.52
CAS: 61868-03-9

Physical Properties

Property code	Value	Unit	Source
gf	104.22	kJ/mol	Joback Method
hf	-446.05	kJ/mol	Joback Method
hfus	37.92	kJ/mol	Joback Method
hvap	57.11	kJ/mol	Joback Method
log10ws	-7.29		Crippen Method
logp	7.370		Crippen Method
mcvol	278.570	ml/mol	McGowan Method
pc	1092.10	kPa	Joback Method
tb	633.24	K	Joback Method
tc	796.51	K	Joback Method
tf	273.89	K	Joback Method
vc	1.087	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	878.88	J/mol×K	769.30	Joback Method
cpg	861.15	J/mol×K	742.09	Joback Method
cpg	842.63	J/mol×K	714.87	Joback Method
cpg	823.28	J/mol×K	687.66	Joback Method
cpg	803.08	J/mol×K	660.45	Joback Method
cpg	782.01	J/mol×K	633.24	Joback Method
cpg	895.83	J/mol×K	796.51	Joback Method
dvisc	0.0085960	Pa×s	273.89	Joback Method

dvisc	0.0000949	Pa×s	633.24	Joback Method
dvisc	0.0001358	Pa×s	573.35	Joback Method
dvisc	0.0002114	Pa×s	513.46	Joback Method
dvisc	0.0003698	Pa×s	453.56	Joback Method
dvisc	0.0007671	Pa×s	393.67	Joback Method
dvisc	0.0020674	Pa×s	333.78	Joback Method
hvapt	64.10	kJ/mol	522.50	NIST Webbook
hvapt	67.20	kJ/mol	545.50	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C61868039&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
hvapt: Enthalpy of vaporization at a given temperature
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

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.