cis-2-Heptadecene

Other names: (Z)-2-Heptadecene
2-heptadecene (Z)
Inchi: InChI=1S/C17H34/c1-3-5-7-9-11-13-15-17-16-14-12-10-8-6-4-2/h3,5H,4,6-17H2,1-2H3/b
InchiKey: GCWAFWMUTOXMIT-HYXAFXHYSA-N
Formula: C17H34
SMILES: CC=CCCCCCCCCCCCCCC
Mol. weight [g/mol]: 238.45

Physical Properties

Property code	Value	Unit	Source
gf	172.48	kJ/mol	Joback Method
hf	-276.99	kJ/mol	Joback Method
hfus	39.99	kJ/mol	Joback Method
hvap	53.39	kJ/mol	Joback Method
log10ws	-6.79		Crippen Method
logp	6.654		Crippen Method
mcvol	246.090	ml/mol	McGowan Method
pc	1277.33	kPa	Joback Method
rinpol	1708.60		NIST Webbook
rinpol	1706.90		NIST Webbook
rinpol	1716.00		NIST Webbook
rinpol	1716.00		NIST Webbook
rinpol	1721.00		NIST Webbook
rinpol	1721.00		NIST Webbook
ripol	1743.00		NIST Webbook
ripol	1742.80		NIST Webbook
ripol	1743.00		NIST Webbook
tb	592.52	K	Joback Method
tc	756.35	K	Joback Method
tf	276.27	K	Joback Method
vc	0.968	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	648.17	J/mol×K	592.52	Joback Method
cpg	667.50	J/mol×K	619.83	Joback Method
cpg	686.02	J/mol×K	647.13	Joback Method
cpg	703.76	J/mol×K	674.44	Joback Method
cpg	720.76	J/mol×K	701.74	Joback Method
cpg	737.03	J/mol×K	729.05	Joback Method
cpg	752.62	J/mol×K	756.35	Joback Method
dvisc	0.0044937	Pa×s	276.27	Joback Method
dvisc	0.0015040	Pa×s	328.98	Joback Method
dvisc	0.0006810	Pa×s	381.69	Joback Method
dvisc	0.0003738	Pa×s	434.39	Joback Method
dvisc	0.0002336	Pa×s	487.10	Joback Method
dvisc	0.0001600	Pa×s	539.81	Joback Method
dvisc	0.0001172	Pa×s	592.52	Joback Method

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=R146786&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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