6-methyltetradecane

Other names: 6-Methyltetradecane
Inchi: InChI=1S/C15H32/c1-4-6-8-9-10-12-14-15(3)13-11-7-5-2/h15H,4-14H2,1-3H3
InchiKey: ONQXEQPEKDADGM-UHFFFAOYSA-N
Formula: C15H32
SMILES: CCCCCCCCC(C)CCCCC
Mol. weight [g/mol]: 212.41
CAS: 26730-16-5

Physical Properties

Property code	Value	Unit	Source
af	0.6403		Cheméo Relay (1.0)
gf	72.98	kJ/mol	Joback Method
hf	-360.70	kJ/mol	Cheméo Relay (1.0)
hfus	31.08	kJ/mol	Joback Method
hvap	69.83	kJ/mol	Cheméo Relay (1.0)
ie	9.55	eV	Cheméo Relay (1.0)
log10ws	-7.20		Cheméo Relay (1.0)
logp	5.953		Crippen Method
mcvol	222.210	ml/mol	McGowan Method
pc	1423.99	kPa	Joback Method
tb	526.45	K	Cheméo Relay (1.0)
tc	689.77	K	Cheméo Relay (1.0)
tf	237.80 ± 2.00	K	NIST Webbook
vc	0.864	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	558.22	J/mol×K	542.16	Joback Method
cpg	577.24	J/mol×K	569.12	Joback Method
cpg	595.52	J/mol×K	596.08	Joback Method
cpg	613.07	J/mol×K	623.04	Joback Method
cpg	629.92	J/mol×K	650.00	Joback Method
cpg	646.08	J/mol×K	676.97	Joback Method

cpg	661.59	J/mol×K	703.93	Joback Method
dvisc	0.0083877	Pa×s	243.81	Joback Method
dvisc	0.0024681	Pa×s	293.53	Joback Method
dvisc	0.0010352	Pa×s	343.26	Joback Method
dvisc	0.0005409	Pa×s	392.99	Joback Method
dvisc	0.0003270	Pa×s	442.71	Joback Method
dvisc	0.0002189	Pa×s	492.43	Joback Method
dvisc	0.0001577	Pa×s	542.16	Joback Method

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C26730165&Units=SI

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

af: Acentric Factor
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
ie: Ionization energy
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