cis-7-Tetradecen-1-ol

Other names: Z-7-Tetradecenol
(7Z)-7-Tetradecen-1-ol
7-Tetradecen-1-ol, (Z)
7-Tetradecenol, Z
(Z)-7-Tetradecen-1-ol
cis-7-Tetradecenol

Inchi: InChI=1S/C14H28O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15/h7-8,15H,2-6,9-14H2,1H3/b8

InchiKey: QXYAJPQXTGQWRU-FPLPWBNLSA-N

Formula: C14H28O

SMILES: CCCCCCC=CCCCCCCO

Mol. weight [g/mol]: 212.37

CAS: 40642-43-1

Physical Properties

Property code	Value	Unit	Source
gf	10.40	kJ/mol	Joback Method
hf	-367.30	kJ/mol	Joback Method
hfus	36.31	kJ/mol	Joback Method
hvap	99.90	kJ/mol	NIST Webbook
log10ws	-4.80		Crippen Method
logp	4.456		Crippen Method
mcvol	209.690	ml/mol	McGowan Method
pc	1710.36	kPa	Joback Method
rinpol	1660.00		NIST Webbook
ripol	2206.00		NIST Webbook
tb	616.06	K	Joback Method
tc	778.82	K	Joback Method
tf	303.28	K	Joback Method
vc	0.819	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	562.60	J/mol×K	616.06	Joback Method

cpg	633.37	J/mol×K	751.70	Joback Method
cpg	620.41	J/mol×K	724.57	Joback Method
cpg	606.89	J/mol×K	697.44	Joback Method
cpg	592.76	J/mol×K	670.31	Joback Method
cpg	578.00	J/mol×K	643.19	Joback Method
cpg	645.78	J/mol×K	778.82	Joback Method
dvisc	0.0000504	Pa×s	616.06	Joback Method
dvisc	0.0000829	Pa×s	563.93	Joback Method
dvisc	0.0001512	Pa×s	511.80	Joback Method
dvisc	0.0003158	Pa×s	459.67	Joback Method
dvisc	0.0007966	Pa×s	407.54	Joback Method
dvisc	0.0026357	Pa×s	355.41	Joback Method
dvisc	0.0131572	Pa×s	303.28	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=C40642431&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