Cyclopentane, (2-hexyloctyl)-

Other names:	1-Cyclopentyl-2-n-hexyloctane
	7-(Cyclopentylmethyl)tridecane
Inchi:	InChI=1S/C19H38/c1-3-5-7-9-13-18(14-10-8-6-4-2)17-19-15-11-12-16-19/h18-19H,3-17H
InchiKey:	XANJIFLJGFYUDD-UHFFFAOYSA-N
Formula:	C19H38
SMILES:	CCCCCCC(CCCCCC)CC1CCCC1
Mol. weight [g/mol]:	266.50
CAS:	55044-77-4

Physical Properties

Property code	Value	Unit	Source
gf	143.21	kJ/mol	Joback Method
hf	-380.29	kJ/mol	Joback Method
hfus	35.38	kJ/mol	Joback Method
hvap	57.76	kJ/mol	Joback Method
log10ws	-7.19		Crippen Method
logp	7.124		Crippen Method
mcvol	267.710	ml/mol	McGowan Method
pc	1227.70	kPa	Joback Method
tb	648.96	K	Joback Method
tc	826.50	K	Joback Method
tf	299.79	K	Joback Method
vc	1.034	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	775.73	J/mol×K	648.96	Joback Method
cpg	798.46	J/mol×K	678.55	Joback Method
cpg	820.10	J/mol×K	708.14	Joback Method
cpg	840.68	J/mol×K	737.73	Joback Method
cpg	860.25	J/mol×K	767.32	Joback Method
cpg	878.85	J/mol×K	796.91	Joback Method
cpg	896.52	J/mol×K	826.50	Joback Method

dvisc	0.0057104	Pa×s	299.79	Joback Method
dvisc	0.0018807	Pa×s	357.98	Joback Method
dvisc	0.0008450	Pa×s	416.18	Joback Method
dvisc	0.0004620	Pa×s	474.38	Joback Method
dvisc	0.0002882	Pa×s	532.57	Joback Method
dvisc	0.0001973	Pa×s	590.77	Joback Method
dvisc	0.0001446	Pa×s	648.96	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55044774&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
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

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