Cyclopentene, 3-undecyl-

Other names:	Undecane, 1-(2-cyclopenten-1-yl)-
	1-Undecylcyclopent-2-ene
	Hydnocarpyl hydrocarbon
	3-n-Undecylcyclopentene
Inchi:	InChI=1S/C16H30/c1-2-3-4-5-6-7-8-9-10-13-16-14-11-12-15-16/h11,14,16H,2-10,12-13,1
InchiKey:	ORDYQBBWOHTMIZ-UHFFFAOYSA-N
Formula:	C16H30
SMILES:	CCCCCCCCCCCC1C=CCC1
Mol. weight [g/mol]:	222.41
CAS:	24828-58-8

Physical Properties

Property code	Value	Unit	Source
gf	150.35	kJ/mol	Joback Method
hf	-255.31	kJ/mol	Joback Method
hfus	32.35	kJ/mol	Joback Method
hvap	51.76	kJ/mol	Joback Method
log10ws	-6.03		Crippen Method
logp	5.873		Crippen Method
mcvol	221.140	ml/mol	McGowan Method
pc	1552.45	kPa	Joback Method
tb	579.92	K	Joback Method
tc	759.52	K	Joback Method
tf	281.74	K	Joback Method
vc	0.859	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	583.42	J/mol×K	579.92	Joback Method
cpg	677.51	J/mol×K	729.58	Joback Method
cpg	660.53	J/mol×K	699.65	Joback Method
cpg	642.67	J/mol×K	669.72	Joback Method
cpg	623.89	J/mol×K	639.79	Joback Method

cpg	604.15	J/mol×K	609.85	Joback Method
cpg	693.63	J/mol×K	759.52	Joback Method
dvisc	0.0002158	Pa×s	579.92	Joback Method
dvisc	0.0002810	Pa×s	530.22	Joback Method
dvisc	0.0003863	Pa×s	480.53	Joback Method
dvisc	0.0005716	Pa×s	430.83	Joback Method
dvisc	0.0009367	Pa×s	381.13	Joback Method
dvisc	0.0017802	Pa×s	331.44	Joback Method
dvisc	0.0042434	Pa×s	281.74	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C24828588&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

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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