Heneicosane, 11-cyclopentyl-

Other names:	Cyclopentane, (1-decylundecyl)-
	11-Cyclopentylheneicosane
Inchi:	InChI=1S/C26H52/c1-3-5-7-9-11-13-15-17-21-25(26-23-19-20-24-26)22-18-16-14-12-10-
InchiKey:	LEQBWYDHNLNMED-UHFFFAOYSA-N
Formula:	C26H52
SMILES:	CCCCCCCCCCC(CCCCCCCCCC)C1CCCC1
Mol. weight [g/mol]:	364.69
CAS:	6703-81-7

Physical Properties

Property code	Value	Unit	Source
gf	202.15	kJ/mol	Joback Method
hf	-524.77	kJ/mol	Joback Method
hfus	53.51	kJ/mol	Joback Method
hvap	73.34	kJ/mol	Joback Method
log10ws	-10.12		Crippen Method
logp	9.854		Crippen Method
mcvol	366.340	ml/mol	McGowan Method
pc	804.33	kPa	Joback Method
rinpol	2548.00		NIST Webbook
tb	809.12	K	Joback Method
tc	993.11	K	Joback Method
tf	260.50 ± 1.50	K	NIST Webbook
tf	260.50 ± 1.50	K	NIST Webbook
tf	260.45 ± 0.50	K	NIST Webbook
vc	1.427	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1340.50	J/mol×K	993.11	Joback Method
cpg	1212.78	J/mol×K	809.12	Joback Method
cpg	1237.03	J/mol×K	839.78	Joback Method
cpg	1260.02	J/mol×K	870.45	Joback Method

cpg	1281.80	J/mol×K	901.11	Joback Method
cpg	1302.44	J/mol×K	931.78	Joback Method
cpg	1321.98	J/mol×K	962.44	Joback Method
dvisc	0.0000594	Pa×s	809.12	Joback Method
dvisc	0.0026650	Pa×s	378.68	Joback Method
dvisc	0.0008534	Pa×s	450.42	Joback Method
dvisc	0.0003737	Pa×s	522.16	Joback Method
dvisc	0.0001998	Pa×s	593.90	Joback Method
dvisc	0.0001222	Pa×s	665.64	Joback Method
dvisc	0.0000823	Pa×s	737.38	Joback Method
hvapt	92.40	kJ/mol	505.00	NIST Webbook

Sources

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=C6703817&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
hvapt: Enthalpy of vaporization at a given temperature
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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume