Cyclohexene, 3-heptyl-

Other names: 3-Heptyl-1-cyclohexene
Inchi: InChI=1S/C13H24/c1-2-3-4-5-7-10-13-11-8-6-9-12-13/h8,11,13H,2-7,9-10,12H2,1H3
InchiKey: GPEVHZAJZYGTGA-UHFFFAOYSA-N
Formula: C13H24
SMILES: CCCCCCCC1C=CCCC1
Mol. weight [g/mol]: 180.33
CAS: 15232-93-6

Physical Properties

Property code	Value	Unit	Source
gf	112.99	kJ/mol	Joback Method
hf	-199.55	kJ/mol	Joback Method
hfus	22.48	kJ/mol	Joback Method
hvap	45.25	kJ/mol	Joback Method
log10ws	-4.77		Crippen Method
logp	4.703		Crippen Method
mcvol	178.870	ml/mol	McGowan Method
pc	2019.95	kPa	Joback Method
rinpol	1342.00		NIST Webbook
rinpol	1342.00		NIST Webbook
ripol	1473.00		NIST Webbook
ripol	1480.00		NIST Webbook
ripol	1486.00		NIST Webbook
ripol	1492.00		NIST Webbook
ripol	1497.00		NIST Webbook
ripol	1503.00		NIST Webbook
ripol	1509.00		NIST Webbook
ripol	1523.00		NIST Webbook
ripol	1518.00		NIST Webbook
ripol	1492.20		NIST Webbook
ripol	1506.00		NIST Webbook
ripol	1503.20		NIST Webbook
ripol	1508.90		NIST Webbook
ripol	1489.00		NIST Webbook
ripol	1489.00		NIST Webbook
ripol	1473.00		NIST Webbook
ripol	1503.00		NIST Webbook

ripol	1497.30		NIST Webbook
ripol	1501.00		NIST Webbook
ripol	1489.00		NIST Webbook
ripol	1480.30		NIST Webbook
ripol	1497.30		NIST Webbook
ripol	1486.20		NIST Webbook
tb	515.55	K	Joback Method
tc	707.25	K	Joback Method
tf	244.41	K	Joback Method
vc	0.682	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	427.76	J/mol×K	515.55	Joback Method
cpg	448.18	J/mol×K	547.50	Joback Method
cpg	467.60	J/mol×K	579.45	Joback Method
cpg	486.04	J/mol×K	611.40	Joback Method
cpg	503.53	J/mol×K	643.35	Joback Method
cpg	520.11	J/mol×K	675.30	Joback Method
cpg	535.80	J/mol×K	707.25	Joback Method
dvisc	0.0062694	Pa×s	244.41	Joback Method
dvisc	0.0023112	Pa×s	289.60	Joback Method
dvisc	0.0011155	Pa×s	334.79	Joback Method
dvisc	0.0006402	Pa×s	379.98	Joback Method
dvisc	0.0004135	Pa×s	425.17	Joback Method
dvisc	0.0002904	Pa×s	470.36	Joback Method
dvisc	0.0002170	Pa×s	515.55	Joback Method

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=C15232936&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
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