heptyl-cyclopropane

Other names: n-Heptyl-cyclopropane
Inchi: InChI=1S/C10H20/c1-2-3-4-5-6-7-10-8-9-10/h10H,2-9H2,1H3
InchiKey: IOXWFTVRRBRZFA-UHFFFAOYSA-N
Formula: C10H20
SMILES: CCCCCCCC1CC1
Mol. weight [g/mol]: 140.27

Physical Properties

Property code	Value	Unit	Source
gf	94.07	kJ/mol	Joback Method
hf	-176.93	kJ/mol	Joback Method
hfus	19.79	kJ/mol	Joback Method
hvap	37.77	kJ/mol	Joback Method
log10ws	-3.66		Crippen Method
logp	3.757		Crippen Method
mcvol	140.900	ml/mol	McGowan Method
pc	2384.19	kPa	Joback Method
rinpol	1013.39		NIST Webbook
rinpol	1011.90		NIST Webbook
rinpol	1016.94		NIST Webbook
rinpol	1015.27		NIST Webbook
rinpol	1013.53		NIST Webbook
rinpol	1013.39		NIST Webbook
tb	434.94	K	Joback Method
tc	610.35	K	Joback Method
tf	220.40	K	Joback Method
vc	0.552	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	301.02	J/mol×K	434.94	Joback Method
cpg	317.53	J/mol×K	464.18	Joback Method
cpg	333.26	J/mol×K	493.41	Joback Method

cpg	348.25	J/mol×K	522.65	Joback Method
cpg	362.54	J/mol×K	551.88	Joback Method
cpg	376.14	J/mol×K	581.12	Joback Method
cpg	389.09	J/mol×K	610.35	Joback Method
dvisc	0.0020784	Pa×s	220.40	Joback Method
dvisc	0.0013039	Pa×s	256.16	Joback Method
dvisc	0.0009170	Pa×s	291.91	Joback Method
dvisc	0.0006963	Pa×s	327.67	Joback Method
dvisc	0.0005582	Pa×s	363.43	Joback Method
dvisc	0.0004656	Pa×s	399.18	Joback Method
dvisc	0.0004001	Pa×s	434.94	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=R137881&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume