5-CYCLOHEXYL-1-PENTENE

Other names: Cyclohexane, 4-pentenyl
4-Pentenylcyclohexane
Inchi: InChI=1S/C11H20/c1-2-3-5-8-11-9-6-4-7-10-11/h2,11H,1,3-10H2
InchiKey: CYCUXCSZQIHKAU-UHFFFAOYSA-N
Formula: C11H20
SMILES: C=CCCCC1CCCCC1
Mol. weight [g/mol]: 152.28

Physical Properties

Property code	Value	Unit	Source
af	0.3281		Cheméo Relay (1.0)
gf	154.03	kJ/mol	Joback Method
hf	-122.31	kJ/mol	Cheméo Relay (1.0)
hfus	14.80	kJ/mol	Joback Method
hvap	50.46	kJ/mol	Cheméo Relay (1.0)
ie	9.34	eV	Cheméo Relay (1.0)
log10ws	-5.22		Cheméo Relay (1.0)
logp	3.923		Crippen Method
mcvol	150.690	ml/mol	McGowan Method
pc	2433.84	kPa	Joback Method
rinpol	1123.90		NIST Webbook
rinpol	1124.00		NIST Webbook
tb	479.86	K	Cheméo Relay (1.0)
tc	676.02	K	Cheméo Relay (1.0)
tf	196.51	K	Cheméo Relay (1.0)
vc	0.523	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	328.92	J/mol×K	467.31	Joback Method
cpg	433.20	J/mol×K	666.05	Joback Method
cpg	418.12	J/mol×K	632.93	Joback Method
cpg	402.16	J/mol×K	599.80	Joback Method

cpg	385.30	J/mol×K	566.68	Joback Method
cpg	367.49	J/mol×K	533.56	Joback Method
cpg	348.71	J/mol×K	500.43	Joback Method
dvisc	0.0007465	Pa×s	343.33	Joback Method
dvisc	0.0002520	Pa×s	467.31	Joback Method
dvisc	0.0003374	Pa×s	425.98	Joback Method
dvisc	0.0004809	Pa×s	384.66	Joback Method
dvisc	0.0075473	Pa×s	219.35	Joback Method
dvisc	0.0013071	Pa×s	302.00	Joback Method
dvisc	0.0027332	Pa×s	260.68	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C5729544&Units=SI
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):
Cheméo Relay (1.0, beta):

Legend

af: Acentric Factor
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
ie: Ionization energy
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