

2-Pentene, 5-chloro-

Inchi:	InChI=1S/C5H9Cl/c1-2-3-4-5-6/h2-3H,4-5H2,1H3/b3-2+
InchiKey:	QTRJVMJEBVLXOK-NSCUHMNNSA-N
Formula:	C5H9Cl
SMILES:	CC=CCCCl
Mol. weight [g/mol]:	104.58
CAS:	16435-50-0

Physical Properties

Property code	Value	Unit	Source
gf	59.51	kJ/mol	Joback Method
hf	-45.05	kJ/mol	Joback Method
hfus	13.10	kJ/mol	Joback Method
hvap	31.07	kJ/mol	Joback Method
log10ws	-1.92		Crippen Method
logp	2.191		Crippen Method
mvol	89.250	ml/mol	McGowan Method
pc	3530.46	kPa	Joback Method
rinpol	700.00		NIST Webbook
rinpol	700.00		NIST Webbook
tb	355.39	K	Joback Method
tc	537.38	K	Joback Method
tf	170.95	K	Joback Method
vc	0.344	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	136.94	J/mol×K	355.39	Joback Method
cpg	145.66	J/mol×K	385.72	Joback Method
cpg	153.96	J/mol×K	416.05	Joback Method
cpg	161.85	J/mol×K	446.39	Joback Method
cpg	169.35	J/mol×K	476.72	Joback Method
cpg	176.47	J/mol×K	507.05	Joback Method
cpg	183.25	J/mol×K	537.38	Joback Method

dvisc	0.0039506	Paxs	170.95	Joback Method
dvisc	0.0017260	Paxs	201.69	Joback Method
dvisc	0.0009387	Paxs	232.43	Joback Method
dvisc	0.0005886	Paxs	263.17	Joback Method
dvisc	0.0004069	Paxs	293.91	Joback Method
dvisc	0.0003017	Paxs	324.65	Joback Method
dvisc	0.0002356	Paxs	355.39	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C16435500&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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

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