4,8-dichlorodecane

Inchi: InChI=1S/C10H20Cl2/c1-3-6-10(12)8-5-7-9(11)4-2/h9-10H,3-8H2,1-2H3
InchiKey: KTBJLTYJPRZDIR-UHFFFAOYSA-N
Formula: C10H20Cl2
SMILES: CCCC(Cl)CCCC(Cl)CC
Mol. weight [g/mol]: 211.17

Physical Properties

Property code	Value	Unit	Source
gf	4.58	kJ/mol	Joback Method
hf	-291.77	kJ/mol	Joback Method
hfus	23.00	kJ/mol	Joback Method
hvap	45.85	kJ/mol	Joback Method
log10ws	-4.54		Crippen Method
logp	4.582		Crippen Method
mcvol	176.240	ml/mol	McGowan Method
pc	2000.12	kPa	Joback Method
ripol	1718.00		NIST Webbook
ripol	1723.00		NIST Webbook
ripol	1723.00		NIST Webbook
tb	502.18	K	Joback Method
tc	683.82	K	Joback Method
tf	232.30	K	Joback Method
vc	0.681	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	380.69	J/mol×K	502.18	Joback Method
cpg	395.59	J/mol×K	532.45	Joback Method
cpg	409.82	J/mol×K	562.73	Joback Method
cpg	423.40	J/mol×K	593.00	Joback Method
cpg	436.35	J/mol×K	623.27	Joback Method
cpg	448.68	J/mol×K	653.54	Joback Method
cpg	460.42	J/mol×K	683.82	Joback Method

dvisc	0.0106207	Pa×s	232.30	Joback Method
dvisc	0.0033082	Pa×s	277.28	Joback Method
dvisc	0.0014270	Pa×s	322.26	Joback Method
dvisc	0.0007564	Pa×s	367.24	Joback Method
dvisc	0.0004605	Pa×s	412.22	Joback Method
dvisc	0.0003091	Pa×s	457.20	Joback Method
dvisc	0.0002228	Pa×s	502.18	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R295779&Units=SI

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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