Naphthalene, 1,2-dichloro-

Other names: 1,2-Dichloronaphthalene
Dichloro naphthalene
Inchi: InChI=1S/C10H6Cl2/c11-9-6-5-7-3-1-2-4-8(7)10(9)12/h1-6H
InchiKey: MOXLHAPKZWTHEX-UHFFFAOYSA-N
Formula: C10H6Cl2
SMILES: Clc1ccc2ccccc2c1Cl
Mol. weight [g/mol]: 197.06
CAS: 2050-69-3

Physical Properties

Property code	Value	Unit	Source
gf	209.26	kJ/mol	Joback Method
hf	123.45	kJ/mol	Joback Method
hfus	20.33	kJ/mol	Joback Method
hvap	51.86	kJ/mol	Joback Method
log10ws	-4.65		Crippen Method
logp	4.147		Crippen Method
mcvol	133.020	ml/mol	McGowan Method
pc	3435.91	kPa	Joback Method
rinpol	1646.00		NIST Webbook
tb	558.68	K	Joback Method
tc	808.85	K	Joback Method
tf	346.46	K	Joback Method
vc	0.507	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	256.84	J/mol×K	558.68	Joback Method
cpg	267.70	J/mol×K	600.37	Joback Method
cpg	277.64	J/mol×K	642.07	Joback Method
cpg	286.72	J/mol×K	683.76	Joback Method
cpg	295.04	J/mol×K	725.46	Joback Method
cpg	302.68	J/mol×K	767.15	Joback Method

cpg	309.71	J/mol×K	808.85	Joback Method
dvisc	0.0014074	Pa×s	346.46	Joback Method
dvisc	0.0010135	Pa×s	381.83	Joback Method
dvisc	0.0007716	Pa×s	417.20	Joback Method
dvisc	0.0006131	Pa×s	452.57	Joback Method
dvisc	0.0005036	Pa×s	487.94	Joback Method
dvisc	0.0004248	Pa×s	523.31	Joback Method
dvisc	0.0003662	Pa×s	558.68	Joback Method
hvapt	60.70	kJ/mol	373.00	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2050693&Units=SI
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

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
hvapt:	Enthalpy of vaporization at a given temperature
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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