Naphthalene, 1,4-dichloro-

Other names: 1,4-Dichloronaphthalene
Inchi: InChI=1S/C10H6Cl2/c11-9-5-6-10(12)8-4-2-1-3-7(8)9/h1-6H
InchiKey: JDPKCYMVSKDOGS-UHFFFAOYSA-N
Formula: C10H6Cl2
SMILES: Clc1ccc(Cl)c2ccccc12
Mol. weight [g/mol]: 197.06
CAS: 1825-31-6

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	1620.00		NIST Webbook
rinpol	1620.00		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	58.70	kJ/mol	373.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1825316&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
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
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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