Naphthalene, octachloro-

Other names:	Halowax 1051
	Octachloronaphthalene
	Perchloronaphthalene
	Perna
	1,2,3,4,5,6,7,8-Octachloronaphthalene
Inchi:	InChI=1S/C10Cl8/c11-3-1-2(5(13)9(17)7(3)15)6(14)10(18)8(16)4(1)12
InchiKey:	RTNLUFLDZOAXIC-UHFFFAOYSA-N
Formula:	C10Cl8
SMILES:	Clc1c(Cl)c(Cl)c2c(Cl)c(Cl)c(Cl)c(Cl)c2c1Cl
Mol. weight [g/mol]:	403.73
CAS:	2234-13-1

Physical Properties

Property code	Value	Unit	Source
gf	79.90	kJ/mol	Joback Method
hf	-39.81	kJ/mol	Joback Method
hfus	43.18	kJ/mol	Joback Method
hvap	82.15	kJ/mol	Joback Method
log10ws	-8.76		Crippen Method
logp	8.067		Crippen Method
mcvol	206.460	ml/mol	McGowan Method
pc	2455.60	kPa	Joback Method
rinpol	2879.00		NIST Webbook
tb	813.14	K	Joback Method
tc	1081.99	K	Joback Method
tf	601.10	K	Joback Method
vc	0.801	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	350.16	J/mol×K	813.14	Joback Method
cpg	354.91	J/mol×K	857.95	Joback Method
cpg	359.29	J/mol×K	902.76	Joback Method

cpg	363.35	J/mol×K	947.56	Joback Method
cpg	367.15	J/mol×K	992.37	Joback Method
cpg	370.72	J/mol×K	1037.18	Joback Method
cpg	374.12	J/mol×K	1081.99	Joback Method
dvisc	0.0006414	Pa×s	601.10	Joback Method
dvisc	0.0005357	Pa×s	636.44	Joback Method
dvisc	0.0004560	Pa×s	671.78	Joback Method
dvisc	0.0003945	Pa×s	707.12	Joback Method
dvisc	0.0003460	Pa×s	742.46	Joback Method
dvisc	0.0003071	Pa×s	777.80	Joback Method
dvisc	0.0002754	Pa×s	813.14	Joback Method
hvapt	96.10	kJ/mol	373.00	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	521.20	K	0.07	NIST Webbook

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=C2234131&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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume