

Acenaphthene, 5-chloro-

Inchi:	InChI=1S/C12H9Cl/c13-11-7-6-9-5-4-8-2-1-3-10(11)12(8)9/h1-3,6-7H,4-5H2
InchiKey:	XIDFXORSALFWOP-UHFFFAOYSA-N
Formula:	C12H9Cl
SMILES:	Clc1ccc2c3c(cccc13)CC2
Mol. weight [g/mol]:	188.65
CAS:	5209-33-6

Physical Properties

Property code	Value	Unit	Source
gf	308.96	kJ/mol	Joback Method
hf	185.74	kJ/mol	Joback Method
hfus	20.09	kJ/mol	Joback Method
hvap	52.64	kJ/mol	Joback Method
log10ws	-4.62		Crippen Method
logp	3.592		Crippen Method
mvol	138.100	ml/mol	McGowan Method
pc	3310.55	kPa	Joback Method
rinpol	1639.00		NIST Webbook
tb	579.13	K	Joback Method
tc	825.51	K	Joback Method
tf	377.30	K	Joback Method
vc	0.536	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	304.21	J/molxK	579.13	Joback Method
cpg	357.74	J/molxK	784.44	Joback Method
cpg	348.67	J/molxK	743.38	Joback Method
cpg	338.92	J/molxK	702.32	Joback Method
cpg	328.35	J/molxK	661.26	Joback Method
cpg	316.83	J/molxK	620.19	Joback Method
cpg	366.26	J/molxK	825.51	Joback Method
dvisc	0.0008315	Paxs	579.13	Joback Method

dvisc	0.0008971	Paxs	545.49	Joback Method
dvisc	0.0009774	Paxs	511.85	Joback Method
dvisc	0.0010779	Paxs	478.22	Joback Method
dvisc	0.0012065	Paxs	444.58	Joback Method
dvisc	0.0013756	Paxs	410.94	Joback Method
dvisc	0.0016055	Paxs	377.30	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	592.20	K	103.00	NIST Webbook
tbrp	436.20	K	1.70	NIST Webbook

Sources

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=C5209336&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpola:	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

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