1-Cyclopropyl-2-methylbenzene

Inchi: InChI=1S/C10H12/c1-8-4-2-3-5-10(8)9-6-7-9/h2-5,9H,6-7H2,1H3
InchiKey: RUSPCRNKBONOHH-UHFFFAOYSA-N
Formula: C10H12
SMILES: Cc1ccccc1C1CC1
Mol. weight [g/mol]: 132.20
CAS: 27546-46-9

Physical Properties

Property code	Value	Unit	Source
affp	840.40	kJ/mol	NIST Webbook
basg	807.90	kJ/mol	NIST Webbook
chl	-5725.40 ± 0.80	kJ/mol	NIST Webbook
gf	196.85	kJ/mol	Joback Method
hf	48.13	kJ/mol	Joback Method
hfl	75.30 ± 0.80	kJ/mol	NIST Webbook
hfus	13.44	kJ/mol	Joback Method
hvap	40.70	kJ/mol	Joback Method
log10ws	-3.03		Crippen Method
logp	2.872		Crippen Method
mcvol	117.140	ml/mol	McGowan Method
pc	3333.53	kPa	Joback Method
tb	466.60	K	Joback Method
tc	689.90	K	Joback Method
tf	259.34	K	Joback Method
vc	0.445	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.54	J/mol×K	466.60	Joback Method
cpg	312.26	J/mol×K	652.68	Joback Method
cpg	300.22	J/mol×K	615.47	Joback Method
cpg	287.30	J/mol×K	578.25	Joback Method
cpg	273.42	J/mol×K	541.03	Joback Method

cpg	258.52	J/mol×K	503.82	Joback Method
cpg	323.47	J/mol×K	689.90	Joback Method
dvisc	0.0003992	Pa×s	466.60	Joback Method
dvisc	0.0004515	Pa×s	432.06	Joback Method
dvisc	0.0005217	Pa×s	397.51	Joback Method
dvisc	0.0006195	Pa×s	362.97	Joback Method
dvisc	0.0007629	Pa×s	328.43	Joback Method
dvisc	0.0009866	Pa×s	293.88	Joback Method
dvisc	0.0013663	Pa×s	259.34	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=C27546469&Units=SI

Legend

affp: Proton affinity

basg: Gas basicity

chl: Standard liquid enthalpy of combustion

cpg: Ideal gas heat capacity

dvisc: Dynamic viscosity

gf: Standard Gibbs free energy of formation

hf: Enthalpy of formation at standard conditions

hfl: Liquid phase 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

tb: Normal Boiling Point Temperature

tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume