1-Methyl-2-phenylcyclopropane

Inchi: InChI=1S/C10H12/c1-8-7-10(8)9-5-3-2-4-6-9/h2-6,8,10H,7H2,1H3/t8-,10+/m1/s1
InchiKey: OXZUHSZKOFUBFW-SCZZXKLOSA-N
Formula: C10H12
SMILES: CC1CC1c1ccccc1
Mol. weight [g/mol]: 132.20
CAS: 3145-76-4

Physical Properties

Property code	Value	Unit	Source
gf	198.77	kJ/mol	Joback Method
hf	39.26	kJ/mol	Joback Method
hfus	14.90	kJ/mol	Joback Method
hvap	39.73	kJ/mol	Joback Method
log10ws	-2.73		Crippen Method
logp	2.810		Crippen Method
mcvol	117.140	ml/mol	McGowan Method
pc	3265.31	kPa	Joback Method
tb	461.00 ± 4.00	K	NIST Webbook
tc	678.58	K	Joback Method
tf	242.58	K	Joback Method
vc	0.444	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.19	J/mol×K	456.95	Joback Method
cpg	259.07	J/mol×K	493.89	Joback Method
cpg	274.82	J/mol×K	530.83	Joback Method
cpg	289.51	J/mol×K	567.76	Joback Method
cpg	303.19	J/mol×K	604.70	Joback Method
cpg	315.93	J/mol×K	641.64	Joback Method
cpg	327.79	J/mol×K	678.58	Joback Method
dvisc	0.0011373	Pa×s	242.58	Joback Method
dvisc	0.0008628	Pa×s	278.31	Joback Method

dvisc	0.0006971	Pa×s	314.04	Joback Method
dvisc	0.0005882	Pa×s	349.76	Joback Method
dvisc	0.0005122	Pa×s	385.49	Joback Method
dvisc	0.0004567	Pa×s	421.22	Joback Method
dvisc	0.0004145	Pa×s	456.95	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	360.50 ± 2.50	K	2.70	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=C3145764&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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point

vc: Critical Volume

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