

Phenol, 4-cyclohexyl-

Other names:	Phenol, p-cyclohexyl- p-Cyclohexylphenol 4-Cyclohexylphenol p-Hydroxyphenylcyclohexane
Inchi:	InChI=1S/C12H16O/c13-12-8-6-11(7-9-12)10-4-2-1-3-5-10/h6-10,13H,1-5H2
InchiKey:	OAHMVZYHIJQTQC-UHFFFAOYSA-N
Formula:	C12H16O
SMILES:	Oc1ccc(C2CCCCC2)cc1
Mol. weight [g/mol]:	176.25
CAS:	1131-60-8

Physical Properties

Property code	Value	Unit	Source
gf	32.40	kJ/mol	Joback Method
hf	-177.47	kJ/mol	Joback Method
hfus	18.50	kJ/mol	Joback Method
hvap	58.03	kJ/mol	Joback Method
log10ws	-3.36		Crippen Method
logp	3.440		Crippen Method
mcvol	151.190	ml/mol	McGowan Method
pc	3522.09	kPa	Joback Method
tb	600.81	K	Joback Method
tc	852.64	K	Joback Method
tf	403.80 ± 0.50	K	NIST Webbook
vc	0.498	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	394.52	J/mol×K	600.81	Joback Method
cpg	413.37	J/mol×K	642.78	Joback Method
cpg	430.73	J/mol×K	684.75	Joback Method
cpg	446.75	J/mol×K	726.72	Joback Method
cpg	461.56	J/mol×K	768.70	Joback Method

cpg	475.28	J/mol×K	810.67	Joback Method
cpg	488.07	J/mol×K	852.64	Joback Method
dvisc	0.0025484	Paxs	370.52	Joback Method
dvisc	0.0008995	Paxs	408.90	Joback Method
dvisc	0.0003796	Paxs	447.28	Joback Method
dvisc	0.0001836	Paxs	485.66	Joback Method
dvisc	0.0000988	Paxs	524.05	Joback Method
dvisc	0.0000578	Paxs	562.43	Joback Method
dvisc	0.0000363	Paxs	600.81	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	406.70	K	0.50	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1131608&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mvol:	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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