P-chlorobenzoic acid, 2-p-chlorophenyl hydrazide

Inchi: InChI=1S/C13H10Cl2N2O/c14-10-3-1-9(2-4-10)13(18)17-16-12-7-5-11(15)6-8-12/h1-8,1

InchiKey: TVQQGOLXTDUULU-UHFFFAOYSA-N

Formula: C13H10Cl2N2O

SMILES: O=C(NNc1ccc(Cl)cc1)c1ccc(Cl)cc1

Mol. weight [g/mol]: 281.14

CAS: 36586-31-9

Physical Properties

Property code	Value	Unit	Source
gf	290.14	kJ/mol	Joback Method
hf	101.35	kJ/mol	Joback Method
hfus	36.92	kJ/mol	Joback Method
hvap	78.80	kJ/mol	Joback Method
log10ws	-5.00		Crippen Method
logp	3.750		Crippen Method
mcvol	192.520	ml/mol	McGowan Method
pc	3022.28	kPa	Joback Method
tb	789.23	K	Joback Method
tc	1040.67	K	Joback Method
tf	529.24	K	Joback Method
vc	0.722	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	481.25	J/mol×K	789.23	Joback Method
cpg	492.13	J/mol×K	831.14	Joback Method
cpg	501.97	J/mol×K	873.04	Joback Method
cpg	510.84	J/mol×K	914.95	Joback Method
cpg	518.83	J/mol×K	956.86	Joback Method
cpg	526.02	J/mol×K	998.76	Joback Method
cpg	532.48	J/mol×K	1040.67	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=C36586319&Units=SI

Legend

cpg:	Ideal gas heat capacity
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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