

Phenol, 2-iodo-

Other names:	Phenol, o-iodo- o-Iodophenol 2-Iodophenol o-Iodfenol 2-Iodfenol
Inchi:	InChI=1S/C6H5IO/c7-5-3-1-2-4-6(5)8/h1-4,8H
InchiKey:	KQDJTBPASNJQFQ-UHFFFAOYSA-N
Formula:	C6H5IO
SMILES:	Oc1ccccc1I
Mol. weight [g/mol]:	220.01
CAS:	533-58-4

Physical Properties

Property code	Value	Unit	Source
chs	-2979.80 ± 4.20	kJ/mol	NIST Webbook
gf	15.55	kJ/mol	Joback Method
hf	-31.08	kJ/mol	Joback Method
hfus	15.53	kJ/mol	Joback Method
hvap	53.61	kJ/mol	Joback Method
log10ws	-2.17		Crippen Method
logp	1.997		Crippen Method
mcvol	103.330	ml/mol	McGowan Method
pc	5602.57	kPa	Joback Method
rinpol	1182.00		NIST Webbook
rinpol	1163.00		NIST Webbook
rinpol	1182.00		NIST Webbook
rinpol	1182.00		NIST Webbook
rinpol	1163.00		NIST Webbook
tb	537.12	K	Joback Method
tc	808.34	K	Joback Method
tf	353.58	K	Joback Method
vc	0.318	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	182.45	J/molxK	537.12	Joback Method
cpg	215.59	J/molxK	763.14	Joback Method
cpg	210.19	J/molxK	717.93	Joback Method
cpg	204.31	J/molxK	672.73	Joback Method
cpg	197.83	J/molxK	627.53	Joback Method
cpg	190.59	J/molxK	582.32	Joback Method
cpg	220.68	J/molxK	808.34	Joback Method
dvisc	0.0000916	Paxs	537.12	Joback Method
dvisc	0.0001400	Paxs	506.53	Joback Method
dvisc	0.0002261	Paxs	475.94	Joback Method
dvisc	0.0003900	Paxs	445.35	Joback Method
dvisc	0.0007290	Paxs	414.76	Joback Method
dvisc	0.0015054	Paxs	384.17	Joback Method
dvisc	0.0035242	Paxs	353.58	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	459.70	K	21.30	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=C533584&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chs:	Standard solid 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
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
rinpol:	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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