

2,4,6-Trimethyliodobenzene

Other names:	2-Iodomesitylene Benzene, 2-iodo-1,3,5-trimethyl- Iodo-2,4,6-trimethylbenzene
Inchi:	InChI=1S/C9H11I/c1-6-4-7(2)9(10)8(3)5-6/h4-5H,1-3H3
InchiKey:	GTPNXFKONRIHRW-UHFFFAOYSA-N
Formula:	C9H11I
SMILES:	<chem>Cc1cc(C)c(I)c(C)c1</chem>
Mol. weight [g/mol]:	246.09
CAS:	4028-63-1

Physical Properties

Property code	Value	Unit	Source
gf	166.54	kJ/mol	Joback Method
hf	49.90	kJ/mol	Joback Method
hfus	16.35	kJ/mol	Joback Method
hvap	49.26	kJ/mol	Joback Method
log10ws	-4.05		Crippen Method
logp	3.216		Crippen Method
mcvol	139.730	ml/mol	McGowan Method
pc	3025.61	kPa	Joback Method
tb	540.08	K	Joback Method
tc	785.74	K	Joback Method
tf	313.23	K	Joback Method
vc	0.519	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	264.88	J/mol×K	540.08	Joback Method
cpg	277.13	J/mol×K	581.02	Joback Method
cpg	288.62	J/mol×K	621.97	Joback Method
cpg	299.39	J/mol×K	662.91	Joback Method
cpg	309.47	J/mol×K	703.85	Joback Method
cpg	318.90	J/mol×K	744.80	Joback Method

cpg	327.71	J/mol×K	785.74	Joback Method
dvisc	0.0016845	Paxs	313.23	Joback Method
dvisc	0.0010434	Paxs	351.04	Joback Method
dvisc	0.0007094	Paxs	388.85	Joback Method
dvisc	0.0005165	Paxs	426.65	Joback Method
dvisc	0.0003959	Paxs	464.46	Joback Method
dvisc	0.0003159	Paxs	502.27	Joback Method
dvisc	0.0002602	Paxs	540.08	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.38029e+01
Coeff. B	-4.01797e+03
Coeff. C	-8.57100e+01
Temperature range (K), min.	383.00
Temperature range (K), max.	558.89

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=C4028631&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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