

iodo(2H3)methane

Other names:	iodomethane-d3
Inchi:	InChI=1S/CH3I/c1-2/h1H3/i1D3
InchiKey:	INQOMBQAUQQDDS-FIBGUPNXSA-N
Formula:	CD3I
SMILES:	CI
Mol. weight [g/mol]:	144.96
CAS:	865-50-9

Physical Properties

Property code	Value	Unit	Source
gf	15.66	kJ/mol	Joback Method
hf	12.90	kJ/mol	Joback Method
hfus	2.75	kJ/mol	Joback Method
hvap	27.19	kJ/mol	Joback Method
log10ws	-1.19		Crippen Method
logp	1.051		Crippen Method
mcvol	50.770	ml/mol	McGowan Method
pc	5602.57	kPa	Joback Method
tb	315.42	K	Joback Method
tc	522.45	K	Joback Method
tf	159.09	K	Joback Method
vc	0.179	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	47.27	J/molxK	315.42	Joback Method
cpg	58.97	J/molxK	487.95	Joback Method
cpg	56.92	J/molxK	453.44	Joback Method
cpg	54.74	J/molxK	418.94	Joback Method
cpg	52.41	J/molxK	384.43	Joback Method
cpg	49.92	J/molxK	349.93	Joback Method
cpg	60.89	J/molxK	522.45	Joback Method
dvisc	0.0004180	Paxs	315.42	Joback Method

dvisc	0.0005193	Paxs	289.37	Joback Method
dvisc	0.0006734	Paxs	263.31	Joback Method
dvisc	0.0009245	Paxs	237.25	Joback Method
dvisc	0.0013726	Paxs	211.20	Joback Method
dvisc	0.0022777	Paxs	185.15	Joback Method
dvisc	0.0044613	Paxs	159.09	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C865509&Units=SI
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

Legend

cp_g:	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:	Log ₁₀ 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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