

3-Decene, 1-iodo-

Inchi:	InChI=1S/C10H19I/c1-2-3-4-5-6-7-8-9-10-11/h7-8H,2-6,9-10H2,1H3/b8-7-
InchiKey:	WZRQLTGDDOMVHK-FPLPWBNLSA-N
Formula:	C10H19I
SMILES:	CCCCCCC=CCCI
Mol. weight [g/mol]:	266.16
CAS:	116401-32-2

Physical Properties

Property code	Value	Unit	Source
gf	171.66	kJ/mol	Joback Method
hf	-55.64	kJ/mol	Joback Method
hfus	26.26	kJ/mol	Joback Method
hvap	47.19	kJ/mol	Joback Method
log10ws	-4.81		Crippen Method
logp	4.338		Crippen Method
mcvol	173.280	ml/mol	McGowan Method
pc	2167.36	kPa	Joback Method
tb	525.50	K	Joback Method
tc	725.13	K	Joback Method
tf	255.44	K	Joback Method
vc	0.663	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	362.58	J/molxK	525.50	Joback Method
cpg	377.28	J/molxK	558.77	Joback Method
cpg	391.18	J/molxK	592.04	Joback Method
cpg	404.34	J/molxK	625.32	Joback Method
cpg	416.79	J/molxK	658.59	Joback Method
cpg	428.57	J/molxK	691.86	Joback Method
cpg	439.73	J/molxK	725.13	Joback Method
dvisc	0.0053109	Paxs	255.44	Joback Method
dvisc	0.0020980	Paxs	300.45	Joback Method

dvisc	0.0010557	Paxs	345.46	Joback Method
dvisc	0.0006224	Paxs	390.47	Joback Method
dvisc	0.0004092	Paxs	435.48	Joback Method
dvisc	0.0002911	Paxs	480.49	Joback Method
dvisc	0.0002195	Paxs	525.50	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C116401322&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
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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