

3-Decen-5-one, 2-methyl-

Inchi:	InChI=1S/C11H20O/c1-4-5-6-7-11(12)9-8-10(2)3/h8-10H,4-7H2,1-3H3/b9-8+
InchiKey:	WLJBQBMNNUHELQ-CMDGGGOBGSA-N
Formula:	C11H20O
SMILES:	CCCCC(=O)C=CC(C)C
Mol. weight [g/mol]:	168.28
CAS:	32064-75-8

Physical Properties

Property code	Value	Unit	Source
gf	-9.40	kJ/mol	Joback Method
hf	-271.01	kJ/mol	Joback Method
hfus	22.52	kJ/mol	Joback Method
hvap	46.40	kJ/mol	Joback Method
log10ws	-3.32		Crippen Method
logp	3.348		Crippen Method
mvol	163.120	ml/mol	McGowan Method
pc	2161.32	kPa	Joback Method
tb	223.50 ± 4.00	K	NIST Webbook
tc	691.20	K	Joback Method
tf	243.58	K	Joback Method
vc	0.631	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	371.23	J/mol×K	508.67	Joback Method
cpg	440.81	J/mol×K	660.78	Joback Method
cpg	428.22	J/mol×K	630.36	Joback Method
cpg	415.00	J/mol×K	599.94	Joback Method
cpg	401.11	J/mol×K	569.51	Joback Method
cpg	386.53	J/mol×K	539.09	Joback Method
cpg	452.78	J/mol×K	691.20	Joback Method
dvisc	0.0001998	Paxs	508.67	Joback Method
dvisc	0.0002698	Paxs	464.49	Joback Method

dvisc	0.0003881	Paxs	420.31	Joback Method
dvisc	0.0006080	Paxs	376.12	Joback Method
dvisc	0.0010735	Paxs	331.94	Joback Method
dvisc	0.0022568	Paxs	287.76	Joback Method
dvisc	0.0062124	Paxs	243.58	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C32064758&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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