

9-Decen-2-one, 5-methylene-

Other names:	5-Methylene-9-decen-2-one
Inchi:	InChI=1S/C11H18O/c1-4-5-6-7-10(2)8-9-11(3)12/h4H,1-2,5-9H2,3H3
InchiKey:	MWVKBWOOAAKHSGS-UHFFFAOYSA-N
Formula:	C11H18O
SMILES:	<chem>C=CCCCC(=C)CCC(C)=O</chem>
Mol. weight [g/mol]:	166.26

Physical Properties

Property code	Value	Unit	Source
gf	79.95	kJ/mol	Joback Method
hf	-141.88	kJ/mol	Joback Method
hfus	21.97	kJ/mol	Joback Method
hvap	45.57	kJ/mol	Joback Method
log10ws	-3.41		Crippen Method
logp	3.268		Crippen Method
mcvol	158.820	ml/mol	McGowan Method
pc	2220.80	kPa	Joback Method
ripol	1911.00		NIST Webbook
ripol	1911.00		NIST Webbook
tb	498.19	K	Joback Method
tc	679.23	K	Joback Method
tf	246.18	K	Joback Method
vc	0.621	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	351.46	J/mol×K	498.19	Joback Method
cpg	365.86	J/mol×K	528.36	Joback Method
cpg	379.58	J/mol×K	558.54	Joback Method
cpg	392.65	J/mol×K	588.71	Joback Method
cpg	405.09	J/mol×K	618.89	Joback Method
cpg	416.93	J/mol×K	649.06	Joback Method
cpg	428.20	J/mol×K	679.23	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U142956&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/40-403-9/9-Decen-2-one-5-methylene.pdf>

Generated by Cheméo on 2024-05-05 03:53:47.875792182 +0000 UTC m=+17170476.796369499.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.