

(Z)-5-octen-2-one

Other names:	5-OCten-2-one, (Z)-
Inchi:	InChI=1S/C8H14O/c1-3-4-5-6-7-8(2)9/h4-5H,3,6-7H2,1-2H3/b5-4-
InchiKey:	NBfKNcBRfJKDDR-PLNGDYQASA-N
Formula:	C8H14O
SMILES:	CCC=CCCC(C)=O
Mol. weight [g/mol]:	126.20

Physical Properties

Property code	Value	Unit	Source
gf	-32.22	kJ/mol	Joback Method
hf	-203.81	kJ/mol	Joback Method
hfus	18.28	kJ/mol	Joback Method
hvap	40.11	kJ/mol	Joback Method
log10ws	-2.30		Crippen Method
logp	2.322		Crippen Method
mcvol	120.850	ml/mol	McGowan Method
pc	2856.62	kPa	Joback Method
rinpol	987.00		NIST Webbook
rinpol	987.00		NIST Webbook
rinpol	955.00		NIST Webbook
tb	440.47	K	Joback Method
tc	624.44	K	Joback Method
tf	224.77	K	Joback Method
vc	0.469	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	239.73	J/mol×K	440.47	Joback Method
cpg	295.21	J/mol×K	593.78	Joback Method
cpg	285.17	J/mol×K	563.12	Joback Method
cpg	274.62	J/mol×K	532.46	Joback Method
cpg	263.55	J/mol×K	501.79	Joback Method
cpg	251.92	J/mol×K	471.13	Joback Method

cpg	304.76	J/mol×K	624.44	Joback Method
dvisc	0.0002453	Pa×s	440.47	Joback Method
dvisc	0.0003179	Pa×s	404.52	Joback Method
dvisc	0.0004335	Pa×s	368.57	Joback Method
dvisc	0.0006321	Pa×s	332.62	Joback Method
dvisc	0.0010100	Pa×s	296.67	Joback Method
dvisc	0.0018362	Pa×s	260.72	Joback Method
dvisc	0.0040418	Pa×s	224.77	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R68441&Units=SI

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
rinpol:	Non-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/20-048-6/Z-5-octen-2-one.pdf>

Generated by Cheméo on 2025-12-05 12:21:53.386739727 +0000 UTC m=+4685510.916780391.

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