2-Cyclopenten-1-one, 2-pentyl-

Other names:	2-Pentyl-2-cyclopenten-1-one
	2-Amyl 2-cyclopenten-1-one
	2-pentylcyclopent-2-en-1-one
Inchi:	InChI=1S/C10H16O/c1-2-3-4-6-9-7-5-8-10(9)11/h7H,2-6,8H2,1H3
InchiKey:	ILHZVKAXFCDFMT-UHFFFAOYSA-N
Formula:	C10H16O
SMILES:	CCCCCC1=CCCC1=O
Mol. weight [g/mol]:	152.23
CAS:	25564-22-1

Physical Properties

Property code	Value	Unit	Source
gf	-24.68	kJ/mol	Joback Method
hf	-260.30	kJ/mol	Joback Method
hfus	14.86	kJ/mol	Joback Method
hvap	43.62	kJ/mol	Joback Method
log10ws	-3.04		Crippen Method
logp	2.856		Crippen Method
mcvol	138.170	ml/mol	McGowan Method
pc	2744.03	kPa	Joback Method
tb	520.11	K	Joback Method
tc	729.28	K	Joback Method
tf	299.10	K	Joback Method
vc	0.530	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	319.94	J/mol×K	520.11	Joback Method
cpg	335.86	J/mol×K	554.97	Joback Method
cpg	351.03	J/mol×K	589.83	Joback Method
cpg	365.46	J/mol×K	624.69	Joback Method
cpg	379.16	J/mol×K	659.55	Joback Method
cpg	392.14	J/mol×K	694.42	Joback Method

cpg	404.40	J/mol×K	729.28	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=C25564221&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume