2-Pentenoyl chloride, 2-methyl-

Other names: 2-methylpent-2-enoyl chloride
Inchi: InChI=1S/C6H9ClO/c1-3-4-5(2)6(7)8/h4H,3H2,1-2H3/b5-4+
InchiKey: JTQXJDWMNNIVRS-SNAWJCMRSA-N
Formula: C6H9ClO
SMILES: CCC=C(C)C(=O)Cl
Mol. weight [g/mol]: 132.59
CAS: 55764-37-9

Physical Properties

Property code	Value	Unit	Source
gf	-69.54	kJ/mol	Joback Method
hf	-188.06	kJ/mol	Joback Method
hfus	15.98	kJ/mol	Joback Method
hvap	40.12	kJ/mol	Joback Method
log10ws	-2.12		Crippen Method
logp	2.108		Crippen Method
mcvol	104.910	ml/mol	McGowan Method
pc	3415.86	kPa	Joback Method
tb	432.02	K	Joback Method
tc	630.18	K	Joback Method
tf	218.19	K	Joback Method
vc	0.407	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	187.11	J/mol×K	432.02	Joback Method
cpg	196.64	J/mol×K	465.05	Joback Method
cpg	205.64	J/mol×K	498.07	Joback Method
cpg	214.15	J/mol×K	531.10	Joback Method
cpg	222.19	J/mol×K	564.13	Joback Method
cpg	229.78	J/mol×K	597.16	Joback Method
cpg	236.95	J/mol×K	630.18	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=C55764379&Units=SI

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