

2,4-Dimethyl-3-pentanol, pentafluoropropionate

Inchi:	InChI=1S/C10H15F5O2/c1-5(2)7(6(3)4)17-8(16)9(11,12)10(13,14)15/h5-7H,1-4H3
InchiKey:	YUENQELFHKHIQJ-UHFFFAOYSA-N
Formula:	C10H15F5O2
SMILES:	CC(C)C(OC(=O)C(F)(F)C(F)(F)F)C(C)C
Mol. weight [g/mol]:	262.22

Physical Properties

Property code	Value	Unit	Source
gf	-1176.29	kJ/mol	Joback Method
hf	-1508.42	kJ/mol	Joback Method
hfus	14.45	kJ/mol	Joback Method
hvap	39.17	kJ/mol	Joback Method
log10ws	-3.48		Crippen Method
logp	3.408		Crippen Method
mcvol	168.050	ml/mol	McGowan Method
pc	1898.60	kPa	Joback Method
rinpol	868.00		NIST Webbook
rinpol	868.00		NIST Webbook
tb	493.06	K	Joback Method
tc	655.06	K	Joback Method
tf	237.41	K	Joback Method
vc	0.669	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	415.29	J/mol×K	493.06	Joback Method
cpg	429.32	J/mol×K	520.06	Joback Method
cpg	442.63	J/mol×K	547.06	Joback Method
cpg	455.24	J/mol×K	574.06	Joback Method
cpg	467.19	J/mol×K	601.06	Joback Method
cpg	478.50	J/mol×K	628.06	Joback Method
cpg	489.20	J/mol×K	655.06	Joback Method

Sources

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=U375656&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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