

trans-2-Decen-1-ol, pentafluoropropionate

Inchi:	InChI=1S/C13H19F5O2/c1-2-3-4-5-6-7-8-9-10-20-11(19)12(14,15)13(16,17)18/h8-9H,2-7
InchiKey:	DDWXFCFXBMQAKJ-CMDGGGOBGSA-N
Formula:	C13H19F5O2
SMILES:	CCCCCCC=CCOC(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]:	302.28

Physical Properties

Property code	Value	Unit	Source
gf	-1063.49	kJ/mol	Joback Method
hf	-1437.28	kJ/mol	Joback Method
hfus	32.99	kJ/mol	Joback Method
hvap	46.97	kJ/mol	Joback Method
log10ws	-4.96		Crippen Method
logp	4.644		Crippen Method
mcvol	206.020	ml/mol	McGowan Method
pc	1531.86	kPa	Joback Method
rinpola	1265.60		NIST Webbook
rinpola	1265.60		NIST Webbook
tb	567.18	K	Joback Method
tc	725.31	K	Joback Method
tf	311.14	K	Joback Method
vc	0.836	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	542.21	J/mol×K	567.18	Joback Method
cpg	556.61	J/mol×K	593.53	Joback Method
cpg	570.27	J/mol×K	619.89	Joback Method
cpg	583.22	J/mol×K	646.24	Joback Method
cpg	595.51	J/mol×K	672.60	Joback Method
cpg	607.15	J/mol×K	698.95	Joback Method
cpg	618.19	J/mol×K	725.31	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=U352667&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
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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