

Glutaric acid, pent-2-en-1-yl 1,1,1-trifluoroprop-2-yl ester

Inchi:	InChI=1S/C13H19F3O4/c1-3-4-5-9-19-11(17)7-6-8-12(18)20-10(2)13(14,15)16/h4-5,10H
InchiKey:	KKKVVKOMSZVLEC-SNAWJCMRSA-N
Formula:	C13H19F3O4
SMILES:	CCC=CCOC(=O)CCCC(=O)OC(C)C(F)(F)F
Mol. weight [g/mol]:	296.28

Physical Properties

Property code	Value	Unit	Source
gf	-913.07	kJ/mol	Joback Method
hf	-1286.39	kJ/mol	Joback Method
hfus	33.50	kJ/mol	Joback Method
hvap	58.67	kJ/mol	Joback Method
log10ws	-3.62		Crippen Method
logp	3.160		Crippen Method
mvol	209.920	ml/mol	McGowan Method
pc	1693.51	kPa	Joback Method
rinpol	1470.00		NIST Webbook
rinpol	1470.00		NIST Webbook
tb	647.72	K	Joback Method
tc	821.37	K	Joback Method
tf	364.70	K	Joback Method
vc	0.829	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	574.23	J/mol×K	647.72	Joback Method
cpg	587.93	J/mol×K	676.66	Joback Method
cpg	600.92	J/mol×K	705.60	Joback Method
cpg	613.22	J/mol×K	734.55	Joback Method
cpg	624.85	J/mol×K	763.49	Joback Method
cpg	635.83	J/mol×K	792.43	Joback Method
cpg	646.20	J/mol×K	821.37	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=U405252&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
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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