

Glutaric acid, 2,2,3,3-tetrafluoropropyl undec-2-enyl ester

Inchi:	InChI=1S/C19H30F4O4/c1-2-3-4-5-6-7-8-9-10-14-26-16(24)12-11-13-17(25)27-15-19(22)
InchiKey:	UCTDRUKJPZPILX-MDZDMXLPSA-N
Formula:	C19H30F4O4
SMILES:	CCCCCCCCC=CCOC(=O)CCCC(=O)OCC(F)(F)C(F)F
Mol. weight [g/mol]:	398.43

Physical Properties

Property code	Value	Unit	Source
gf	-1057.36	kJ/mol	Joback Method
hf	-1606.34	kJ/mol	Joback Method
hfus	52.12	kJ/mol	Joback Method
hvap	71.21	kJ/mol	Joback Method
log10ws	-5.98		Crippen Method
logp	5.450		Crippen Method
mcvol	296.230	ml/mol	McGowan Method
pc	1074.28	kPa	Joback Method
rinpola	2115.00		NIST Webbook
rinpola	2115.00		NIST Webbook
tb	784.27	K	Joback Method
tc	961.93	K	Joback Method
tf	432.91	K	Joback Method
vc	1.183	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	916.01	J/molxK	784.27	Joback Method
cpg	932.15	J/molxK	813.88	Joback Method
cpg	947.39	J/molxK	843.49	Joback Method
cpg	961.75	J/molxK	873.10	Joback Method
cpg	975.28	J/molxK	902.71	Joback Method
cpg	988.02	J/molxK	932.32	Joback Method
cpg	999.98	J/molxK	961.93	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=U394011&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.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
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
rlnol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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