

Glutaric acid, hept-2-yl 4-nitrophenyl ester

Inchi:	InChI=1S/C18H25NO6/c1-3-4-5-7-14(2)24-17(20)8-6-9-18(21)25-16-12-10-15(11-13-16)
InchiKey:	INJCPVJTWDCFCY-UHFFFAOYSA-N
Formula:	C18H25NO6
SMILES:	CCCCC(C)OC(=O)CCCC(=O)Oc1ccc([N+](=O)[O-])cc1
Mol. weight [g/mol]:	351.39

Physical Properties

Property code	Value	Unit	Source
gf	-231.27	kJ/mol	Joback Method
hf	-695.43	kJ/mol	Joback Method
hfus	49.44	kJ/mol	Joback Method
hvap	93.11	kJ/mol	Joback Method
log10ws	-5.60		Crippen Method
logp	4.183		Crippen Method
mvol	273.020	ml/mol	McGowan Method
pc	1577.21	kPa	Joback Method
rinpol	2594.00		NIST Webbook
rinpol	2594.00		NIST Webbook
tb	946.88	K	Joback Method
tc	1171.09	K	Joback Method
tf	604.49	K	Joback Method
vc	1.060	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	870.95	J/molxK	946.88	Joback Method
cpg	883.36	J/molxK	984.25	Joback Method
cpg	894.49	J/molxK	1021.62	Joback Method
cpg	904.36	J/molxK	1058.99	Joback Method
cpg	913.01	J/molxK	1096.36	Joback Method
cpg	920.45	J/molxK	1133.72	Joback Method
cpg	926.74	J/molxK	1171.09	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=U391975&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
hvpap:	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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