

Glutaric acid, ethyl 3-methyl-4-nitrobenzyl ester

Inchi:	InChI=1S/C15H19NO6/c1-3-21-14(17)5-4-6-15(18)22-10-12-7-8-13(16(19)20)11(2)9-12/
InchiKey:	LFZGRFNNHJPUIQ-UHFFFAOYSA-N
Formula:	C15H19NO6
SMILES:	CCOC(=O)CCCC(=O)OCc1ccc([N+](=O)[O-])c(C)c1
Mol. weight [g/mol]:	309.31

Physical Properties

Property code	Value	Unit	Source
gf	-263.72	kJ/mol	Joback Method
hf	-639.70	kJ/mol	Joback Method
hfus	44.80	kJ/mol	Joback Method
hvap	87.49	kJ/mol	Joback Method
log10ws	-4.13		Crippen Method
logp	2.680		Crippen Method
mcvol	230.750	ml/mol	McGowan Method
pc	1970.05	kPa	Joback Method
rinpola	2387.00		NIST Webbook
tb	883.66	K	Joback Method
tc	1108.06	K	Joback Method
tf	598.20	K	Joback Method
vc	0.897	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	696.82	J/molxK	883.66	Joback Method
cpg	708.65	J/molxK	921.06	Joback Method
cpg	719.33	J/molxK	958.46	Joback Method
cpg	728.87	J/molxK	995.86	Joback Method
cpg	737.28	J/molxK	1033.26	Joback Method
cpg	744.57	J/molxK	1070.66	Joback Method
cpg	750.76	J/molxK	1108.06	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=U376845&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
hvac:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mccol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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