

Succinic acid, cyclohexylmethyl 3-nitrobenzyl ester

Inchi:	InChI=1S/C18H23NO6/c20-17(24-12-14-5-2-1-3-6-14)9-10-18(21)25-13-15-7-4-8-16(11-
InchiKey:	JUYJNLJTJOKVRF-UHFFFAOYSA-N
Formula:	C18H23NO6
SMILES:	O=C(CCC(=O)OCC1CCCCC1)OCc1cccc([N+](=O)[O-])c1
Mol. weight [g/mol]:	349.38

Physical Properties

Property code	Value	Unit	Source
gf	-204.38	kJ/mol	Joback Method
hf	-635.83	kJ/mol	Joback Method
hfus	44.80	kJ/mol	Joback Method
hvap	93.93	kJ/mol	Joback Method
log10ws	-4.98		Crippen Method
logp	3.542		Crippen Method
mcvol	262.160	ml/mol	McGowan Method
pc	1856.31	kPa	Joback Method
rinpola	2875.00		NIST Webbook
rinpola	2875.00		NIST Webbook
tb	966.87	K	Joback Method
tc	1208.73	K	Joback Method
tf	626.87	K	Joback Method
vc	0.999	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	862.54	J/mol×K	966.87	Joback Method
cpg	874.81	J/mol×K	1007.18	Joback Method
cpg	885.45	J/mol×K	1047.49	Joback Method
cpg	894.51	J/mol×K	1087.80	Joback Method
cpg	902.02	J/mol×K	1128.11	Joback Method
cpg	908.02	J/mol×K	1168.42	Joback Method
cpg	912.56	J/mol×K	1208.73	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U390182&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
h vap:	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
r in pol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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