

Glutaric acid, monoamide, N-(2-octyl)-, octyl ester

Inchi:	InChI=1S/C21H41NO3/c1-4-6-8-10-11-13-18-25-21(24)17-14-16-20(23)22-19(3)15-12-9
InchiKey:	IUKAWPNQERZGGU-UHFFFAOYSA-N
Formula:	C21H41NO3
SMILES:	CCCCCCCCOC(=O)CCCC(=O)NC(C)CCCCC
Mol. weight [g/mol]:	355.56

Physical Properties

Property code	Value	Unit	Source
gf	-149.95	kJ/mol	Joback Method
hf	-785.96	kJ/mol	Joback Method
hfus	56.11	kJ/mol	Joback Method
hvap	84.29	kJ/mol	Joback Method
log10ws	-6.55		Crippen Method
logp	5.535		Crippen Method
mcvol	325.740	ml/mol	McGowan Method
pc	1037.90	kPa	Joback Method
rinpola	2970.00		NIST Webbook
tb	859.77	K	Joback Method
tc	1053.02	K	Joback Method
tf	486.18	K	Joback Method
vc	1.270	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1064.06	J/molxK	859.77	Joback Method
cpg	1082.62	J/molxK	891.98	Joback Method
cpg	1100.03	J/molxK	924.19	Joback Method
cpg	1116.34	J/molxK	956.39	Joback Method
cpg	1131.57	J/molxK	988.60	Joback Method
cpg	1145.76	J/molxK	1020.81	Joback Method
cpg	1158.95	J/molxK	1053.02	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360856&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.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
m cvol:	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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