

Glutaric acid, monoamide, N-tetradecyl-, butyl ester

Inchi:	InChI=1S/C23H45NO3/c1-3-5-7-8-9-10-11-12-13-14-15-16-20-24-22(25)18-17-19-23(26)
InchiKey:	UHKSLXSYMWFVEI-UHFFFAOYSA-N
Formula:	C23H45NO3
SMILES:	CCCCCCCCCCCCCNC(=O)CCCC(=O)OCCCC
Mol. weight [g/mol]:	383.61

Physical Properties

Property code	Value	Unit	Source
gf	-130.67	kJ/mol	Joback Method
hf	-821.96	kJ/mol	Joback Method
hfus	64.81	kJ/mol	Joback Method
hvap	89.13	kJ/mol	Joback Method
log10ws	-7.28		Crippen Method
logp	6.317		Crippen Method
mvol	353.920	ml/mol	McGowan Method
pc	916.05	kPa	Joback Method
rinpol	2922.00		NIST Webbook
tb	905.97	K	Joback Method
tc	1110.16	K	Joback Method
tf	523.72	K	Joback Method
vc	1.389	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1188.35	J/molxK	905.97	Joback Method
cpg	1207.95	J/molxK	940.00	Joback Method
cpg	1226.24	J/molxK	974.03	Joback Method
cpg	1243.27	J/molxK	1008.06	Joback Method
cpg	1259.10	J/molxK	1042.10	Joback Method
cpg	1273.76	J/molxK	1076.13	Joback Method
cpg	1287.31	J/molxK	1110.16	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U360796&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
r inpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/25-447-8/Glutaric-acid-monoamide-N-tetradecyl-butyl-ester.pdf>

Generated by Cheméo on 2024-04-19 01:58:54.640480384 +0000 UTC m=+15781183.561057698.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.