Glutaric acid, diamide, N,N'-di(3-methylphenyl)-

Inchi: InChI=1S/C19H22N2O2/c1-14-6-3-8-16(12-14)20-18(22)10-5-11-19(23)21-17-9-4-7-15(2

InchiKey: CZCCFMWRMZLYDH-UHFFFAOYSA-N

Formula: C19H22N2O2

SMILES: Cc1cccc(NC(=O)CCCC(=O)Nc2cccc(C)c2)c1

Mol. weight [g/mol]: 310.39

Physical Properties

Property code	Value	Unit	Source
gf	235.60	kJ/mol	Joback Method
hf	-103.59	kJ/mol	Joback Method
hfus	45.67	kJ/mol	Joback Method
hvap	90.13	kJ/mol	Joback Method
log10ws	-4.90		Crippen Method
logp	4.051		Crippen Method
mcvol	254.150	ml/mol	McGowan Method
pc	1961.34	kPa	Joback Method
rinpol	3384.00		NIST Webbook
rinpol	3384.00		NIST Webbook
tb	905.52	K	Joback Method
tc	1135.79	K	Joback Method
tf	586.95	K	Joback Method
vc	0.966	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	777.65	J/mol×K	905.52	Joback Method
cpg	790.88	J/mol×K	943.90	Joback Method
cpg	803.00	J/mol×K	982.28	Joback Method
cpg	814.08	J/mol×K	1020.65	Joback Method
cpg	824.20	J/mol×K	1059.03	Joback Method
cpg	833.43	J/mol×K	1097.41	Joback Method
cpg	841.84	J/mol×K	1135.79	Joback Method

Sources

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=U360925&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
hvap:	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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume