

Glutaric acid, diamide, N,N'-dimethyl-N,N'-dibenzyl-

Inchi:	InChI=1S/C21H26N2O2/c1-22(16-18-10-5-3-6-11-18)20(24)14-9-15-21(25)23(2)17-19-12
InchiKey:	IHESTOYEWHKVNA-UHFFFAOYSA-N
Formula:	C21H26N2O2
SMILES:	CN(Cc1ccccc1)C(=O)CCCC(=O)N(C)Cc1ccccc1
Mol. weight [g/mol]:	338.44

Physical Properties

Property code	Value	Unit	Source
gf	314.48	kJ/mol	Joback Method
hf	-93.81	kJ/mol	Joback Method
hfus	47.47	kJ/mol	Joback Method
hvap	84.47	kJ/mol	Joback Method
log10ws	-4.50		Crippen Method
logp	3.474		Crippen Method
mvol	282.330	ml/mol	McGowan Method
pc	1665.97	kPa	Joback Method
rinpol	3132.00		NIST Webbook
rinpol	3132.00		NIST Webbook
tb	865.86	K	Joback Method
tc	1085.89	K	Joback Method
tf	544.07	K	Joback Method
vc	1.044	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	868.15	J/molxK	865.86	Joback Method
cpg	883.73	J/molxK	902.53	Joback Method
cpg	898.15	J/molxK	939.20	Joback Method
cpg	911.52	J/molxK	975.87	Joback Method
cpg	923.93	J/molxK	1012.55	Joback Method
cpg	935.49	J/molxK	1049.22	Joback Method
cpg	946.30	J/molxK	1085.89	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=U360849&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I

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

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