

Glutaric acid, monoamide, N-(3-methylphenyl)-, octyl ester

Inchi:	InChI=1S/C20H31NO3/c1-3-4-5-6-7-8-15-24-20(23)14-10-13-19(22)21-18-12-9-11-17(2)
InchiKey:	PSJDCANTFFLPHC-UHFFFAOYSA-N
Formula:	C20H31NO3
SMILES:	CCCCCCCCOC(=O)CCCC(=O)Nc1cccc(C)c1
Mol. weight [g/mol]:	333.46

Physical Properties

Property code	Value	Unit	Source
gf	-53.15	kJ/mol	Joback Method
hf	-534.98	kJ/mol	Joback Method
hfus	50.69	kJ/mol	Joback Method
hvap	85.39	kJ/mol	Joback Method
log10ws	-5.62		Crippen Method
logp	5.008		Crippen Method
mvol	287.890	ml/mol	McGowan Method
pc	1371.74	kPa	Joback Method
rinpol	3011.00		NIST Webbook
rinpol	3011.00		NIST Webbook
tb	868.99	K	Joback Method
tc	1072.63	K	Joback Method
tf	528.85	K	Joback Method
vc	1.113	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	907.99	J/molxK	868.99	Joback Method
cpg	923.79	J/molxK	902.93	Joback Method
cpg	938.49	J/molxK	936.87	Joback Method
cpg	952.12	J/molxK	970.81	Joback Method
cpg	964.71	J/molxK	1004.75	Joback Method
cpg	976.31	J/molxK	1038.69	Joback Method
cpg	986.96	J/molxK	1072.63	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=U360919&Units=SI

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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