

Glutaric acid, 3-methylbut-2-en-1-yl 2-methylbutyl ester

Inchi:	InChI=1S/C15H26O4/c1-5-13(4)11-19-15(17)8-6-7-14(16)18-10-9-12(2)3/h9,13H,5-8,10-
InchiKey:	NKKHFSKJKUFDRF-UHFFFAOYSA-N
Formula:	C15H26O4
SMILES:	CCC(C)COC(=O)CCCC(=O)OCC=C(C)C
Mol. weight [g/mol]:	270.36

Physical Properties

Property code	Value	Unit	Source
gf	-323.19	kJ/mol	Joback Method
hf	-740.38	kJ/mol	Joback Method
hfus	35.55	kJ/mol	Joback Method
hvap	66.95	kJ/mol	Joback Method
log10ws	-3.44		Crippen Method
logp	3.255		Crippen Method
mcvol	232.790	ml/mol	McGowan Method
pc	1598.72	kPa	Joback Method
rinpola	1820.00		NIST Webbook
tb	698.78	K	Joback Method
tc	883.94	K	Joback Method
tf	369.09	K	Joback Method
vc	0.898	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	654.83	J/mol×K	698.78	Joback Method
cpg	670.84	J/mol×K	729.64	Joback Method
cpg	686.03	J/mol×K	760.50	Joback Method
cpg	700.43	J/mol×K	791.36	Joback Method
cpg	714.04	J/mol×K	822.22	Joback Method
cpg	726.87	J/mol×K	853.08	Joback Method
cpg	738.96	J/mol×K	883.94	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391685&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
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

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