

Glutaric acid, pentyl 3-phenylprop-2-enyl ester

Inchi:	InChI=1S/C19H26O4/c1-2-3-7-15-22-18(20)13-8-14-19(21)23-16-9-12-17-10-5-4-6-11-17
InchiKey:	WAEPaedHIPTSMS-FMIVXFBMSA-N
Formula:	C19H26O4
SMILES:	CCCCCOC(=O)CCCC(=O)OCC=Cc1ccccc1
Mol. weight [g/mol]:	318.41

Physical Properties

Property code	Value	Unit	Source
gf	-166.11	kJ/mol	Joback Method
hf	-571.34	kJ/mol	Joback Method
hfus	44.78	kJ/mol	Joback Method
hvap	78.43	kJ/mol	Joback Method
log10ws	-4.62		Crippen Method
logp	4.147		Crippen Method
mvol	265.390	ml/mol	McGowan Method
pc	1517.57	kPa	Joback Method
rinpol	2515.00		NIST Webbook
rinpol	2515.00		NIST Webbook
tb	817.54	K	Joback Method
tc	1020.90	K	Joback Method
tf	469.55	K	Joback Method
vc	1.020	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	793.84	J/molxK	817.54	Joback Method
cpg	809.36	J/molxK	851.43	Joback Method
cpg	823.82	J/molxK	885.33	Joback Method
cpg	837.28	J/molxK	919.22	Joback Method
cpg	849.76	J/molxK	953.11	Joback Method
cpg	861.30	J/molxK	987.01	Joback Method
cpg	871.95	J/molxK	1020.90	Joback Method
dvisc	0.0007150	Paxs	469.55	Joback Method

dvisc	0.0003673	Paxs	527.55	Joback Method
dvisc	0.0002152	Paxs	585.55	Joback Method
dvisc	0.0001389	Paxs	643.54	Joback Method
dvisc	0.0000964	Paxs	701.54	Joback Method
dvisc	0.0000707	Paxs	759.54	Joback Method
dvisc	0.0000542	Paxs	817.54	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=U359889&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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

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