

Glutaric acid, cyclopentyl 3-methylbut-2-yl ester

Inchi:	InChI=1S/C15H26O4/c1-11(2)12(3)18-14(16)9-6-10-15(17)19-13-7-4-5-8-13/h11-13H,4-
InchiKey:	KJXONBPMIDGPFE-UHFFFAOYSA-N
Formula:	C15H26O4
SMILES:	CC(C)C(C)OC(=O)CCCC(=O)OC1CCCC1
Mol. weight [g/mol]:	270.36

Physical Properties

Property code	Value	Unit	Source
gf	-360.75	kJ/mol	Joback Method
hf	-792.61	kJ/mol	Joback Method
hfus	27.07	kJ/mol	Joback Method
hvap	66.78	kJ/mol	Joback Method
log10ws	-3.70		Crippen Method
logp	3.230		Crippen Method
mcvol	226.230	ml/mol	McGowan Method
pc	1780.34	kPa	Joback Method
rinpol	1797.00		NIST Webbook
rinpol	1797.00		NIST Webbook
tb	709.58	K	Joback Method
tc	908.41	K	Joback Method
tf	384.03	K	Joback Method
vc	0.853	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	669.69	J/molxK	709.58	Joback Method
cpg	687.76	J/molxK	742.72	Joback Method
cpg	704.75	J/molxK	775.86	Joback Method
cpg	720.68	J/molxK	809.00	Joback Method
cpg	735.57	J/molxK	842.13	Joback Method
cpg	749.42	J/molxK	875.27	Joback Method
cpg	762.25	J/molxK	908.41	Joback Method
dvisc	0.0024150	Paxs	384.03	Joback Method

dvisc	0.0010977	Paxs	438.29	Joback Method
dvisc	0.0005936	Paxs	492.55	Joback Method
dvisc	0.0003627	Paxs	546.81	Joback Method
dvisc	0.0002422	Paxs	601.06	Joback Method
dvisc	0.0001729	Paxs	655.32	Joback Method
dvisc	0.0001300	Paxs	709.58	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405389&Units=SI
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

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

Latest version available from:

<https://www.chemeo.com/cid/83-658-0/Glutaric-acid-cyclopentyl-3-methylbut-2-yl-ester.pdf>

Generated by Cheméo on 2024-04-20 01:59:56.835678803 +0000 UTC m=+15867645.756256114.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.