

Glutaric acid, cyclohexylmethyl 4-methoxybenzyl ester

Inchi:	InChI=1S/C20H28O5/c1-23-18-12-10-17(11-13-18)15-25-20(22)9-5-8-19(21)24-14-16-6-
InchiKey:	QUEOWYCKFHCFGA-UHFFFAOYSA-N
Formula:	C20H28O5
SMILES:	COc1ccc(COC(=O)CCCC(=O)OCC2CCCCC2)cc1
Mol. weight [g/mol]:	348.43

Physical Properties

Property code	Value	Unit	Source
gf	-328.09	kJ/mol	Joback Method
hf	-798.57	kJ/mol	Joback Method
hfus	39.80	kJ/mol	Joback Method
hvap	84.20	kJ/mol	Joback Method
log10ws	-4.87		Crippen Method
logp	4.032		Crippen Method
mcvol	278.790	ml/mol	McGowan Method
pc	1547.57	kPa	Joback Method
rinpol	2773.00		NIST Webbook
rinpol	2773.00		NIST Webbook
tb	883.21	K	Joback Method
tc	1102.01	K	Joback Method
tf	528.03	K	Joback Method
vc	1.046	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	902.00	J/molxK	883.21	Joback Method
cpg	967.21	J/molxK	1065.54	Joback Method
cpg	957.23	J/molxK	1029.08	Joback Method
cpg	945.74	J/molxK	992.61	Joback Method
cpg	932.72	J/molxK	956.14	Joback Method
cpg	918.14	J/molxK	919.68	Joback Method
cpg	975.68	J/molxK	1102.01	Joback Method
dvisc	0.0000425	Paxs	883.21	Joback Method

dvisc	0.0000549	Paxs	824.01	Joback Method
dvisc	0.0000738	Paxs	764.82	Joback Method
dvisc	0.0001044	Paxs	705.62	Joback Method
dvisc	0.0001573	Paxs	646.42	Joback Method
dvisc	0.0002575	Paxs	587.23	Joback Method
dvisc	0.0004706	Paxs	528.03	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391744&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

cp_g:	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
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	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/87-485-8/Glutaric-acid-cyclohexylmethyl-4-methoxybenzyl-ester.pdf>

Generated by Cheméo on 2024-05-02 05:56:54.752441026 +0000 UTC m=+16918663.673018338.

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