

Glutaric acid, 2-octyl tetradecyl ester

Inchi:

InchiKey:

Formula:

SMILES:

Mol. weight [g/mol]:

InChI=1S/C27H52O4/c1-4-6-8-10-11-12-13-14-15-16-17-19-24-30-26(28)22-20-23-27(29)

BVWWXRZMCUAIEU-UHFFFAOYSA-N

C27H52O4

CCCCCCCCCCCCCOC(=O)CCCC(=O)OC(C)CCCCC

440.70

Physical Properties

Property code	Value	Unit	Source
gf	-293.82	kJ/mol	Joback Method
hf	-1095.49	kJ/mol	Joback Method
hfus	67.74	kJ/mol	Joback Method
hvap	93.62	kJ/mol	Joback Method
log10ws	-8.96		Crippen Method
logp	8.303		Crippen Method
mcvol	406.170	ml/mol	McGowan Method
pc	726.53	kPa	Joback Method
rinpol	2991.00		NIST Webbook
rinpol	2991.00		NIST Webbook
tb	969.30	K	Joback Method
tc	1196.72	K	Joback Method
tf	523.37	K	Joback Method
vc	1.589	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1410.04	J/mol×K	969.30	Joback Method
cpg	1501.39	J/mol×K	1158.81	Joback Method
cpg	1486.55	J/mol×K	1120.91	Joback Method
cpg	1470.06	J/mol×K	1083.01	Joback Method
cpg	1451.85	J/mol×K	1045.11	Joback Method
cpg	1431.86	J/mol×K	1007.20	Joback Method
cpg	1514.63	J/mol×K	1196.72	Joback Method
dvisc	0.0000168	Pa×s	969.30	Joback Method

dvisc	0.0000230	Pa×s	894.98	Joback Method
dvisc	0.0000331	Pa×s	820.66	Joback Method
dvisc	0.0000515	Pa×s	746.34	Joback Method
dvisc	0.0000881	Pa×s	672.01	Joback Method
dvisc	0.0001723	Pa×s	597.69	Joback Method
dvisc	0.0004080	Pa×s	523.37	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=U358168&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

Latest version available from:

<https://www.chemeo.com/cid/30-851-3/Glutaric-acid-2-octyl-tetradecyl-ester.pdf>

Generated by Cheméo on 2025-12-23 00:55:05.499932498 +0000 UTC m=+6199503.029973153.

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