

Glutaric acid, 2-ethoxyethyl pentadecyl ester

Inchi: InChI=1S/C24H46O5/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-20-28-23(25)18-17-19-24(26)
InchiKey: NOWUUFXDXMOWEY-UHFFFAOYSA-N
Formula: C24H46O5
SMILES: CCCCCCCCCCCCCCOC(=O)CCCC(=O)OCCOCC
Mol. weight [g/mol]: 414.62

Physical Properties

Property code	Value	Unit	Source
gf	-421.64	kJ/mol	Joback Method
hf	-1160.51	kJ/mol	Joback Method
hfus	64.68	kJ/mol	Joback Method
hvap	89.74	kJ/mol	Joback Method
log10ws	-6.68		Crippen Method
logp	6.371		Crippen Method
mcvol	369.770	ml/mol	McGowan Method
pc	841.62	kPa	Joback Method
rinpola	2889.00		NIST Webbook
tb	923.52	K	Joback Method
tc	1134.13	K	Joback Method
tf	526.79	K	Joback Method
vc	1.446	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1249.72	J/molxK	923.52	Joback Method
cpg	1333.55	J/molxK	1099.03	Joback Method
cpg	1319.88	J/molxK	1063.93	Joback Method
cpg	1304.68	J/molxK	1028.83	Joback Method
cpg	1287.94	J/molxK	993.72	Joback Method
cpg	1269.63	J/molxK	958.62	Joback Method
cpg	1345.72	J/molxK	1134.13	Joback Method
dvisc	0.0000217	Paxs	923.52	Joback Method
dvisc	0.0000289	Paxs	857.40	Joback Method

dvisc	0.0000404	Paxs	791.28	Joback Method
dvisc	0.0000599	Paxs	725.15	Joback Method
dvisc	0.0000963	Paxs	659.03	Joback Method
dvisc	0.0001721	Paxs	592.91	Joback Method
dvisc	0.0003557	Paxs	526.79	Joback Method

Sources

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=U359631&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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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