

Glutaric acid, 2-chloropropyl ethyl ester

Inchi:	InChI=1S/C10H17ClO4/c1-3-14-9(12)5-4-6-10(13)15-7-8(2)11/h8H,3-7H2,1-2H3
InchiKey:	XLGKMUOWQINGHE-UHFFFAOYSA-N
Formula:	C10H17ClO4
SMILES:	CCOC(=O)CCCC(=O)OCC(C)Cl
Mol. weight [g/mol]:	236.69

Physical Properties

Property code	Value	Unit	Source
gf	-448.89	kJ/mol	Joback Method
hf	-760.35	kJ/mol	Joback Method
hfus	27.90	kJ/mol	Joback Method
hvap	60.16	kJ/mol	Joback Method
log10ws	-2.00		Crippen Method
logp	1.890		Crippen Method
mvol	178.880	ml/mol	McGowan Method
pc	2235.52	kPa	Joback Method
rinpol	1579.00		NIST Webbook
tb	617.77	K	Joback Method
tc	805.50	K	Joback Method
tf	361.70	K	Joback Method
vc	0.686	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	443.92	J/molxK	617.77	Joback Method
cpg	456.75	J/molxK	649.06	Joback Method
cpg	468.99	J/molxK	680.35	Joback Method
cpg	480.62	J/molxK	711.63	Joback Method
cpg	491.64	J/molxK	742.92	Joback Method
cpg	502.06	J/molxK	774.21	Joback Method
cpg	511.87	J/molxK	805.50	Joback Method
dvisc	0.0020476	Paxs	361.70	Joback Method
dvisc	0.0010783	Paxs	404.38	Joback Method

dvisc	0.0006418	Paxs	447.06	Joback Method
dvisc	0.0004182	Paxs	489.74	Joback Method
dvisc	0.0002918	Paxs	532.41	Joback Method
dvisc	0.0002148	Paxs	575.09	Joback Method
dvisc	0.0001650	Paxs	617.77	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=U359491&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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