

2-Ethylbutyric acid, 4-chloro-2-methylphenyl ester

Inchi:	InChI=1S/C13H17ClO2/c1-4-10(5-2)13(15)16-12-7-6-11(14)8-9(12)3/h6-8,10H,4-5H2,1-3
InchiKey:	FRAIQDZTEFSSKV-UHFFFAOYSA-N
Formula:	C13H17ClO2
SMILES:	CCC(CC)C(=O)Oc1ccc(Cl)cc1C
Mol. weight [g/mol]:	240.73

Physical Properties

Property code	Value	Unit	Source
gf	-96.56	kJ/mol	Joback Method
hf	-363.88	kJ/mol	Joback Method
hfus	26.15	kJ/mol	Joback Method
hvap	61.28	kJ/mol	Joback Method
log10ws	-4.38		Crippen Method
logp	3.990		Crippen Method
mcvol	189.950	ml/mol	McGowan Method
pc	2167.36	kPa	Joback Method
rinpol	1647.00		NIST Webbook
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tb	646.76	K	Joback Method
tc	859.26	K	Joback Method
tf	374.81	K	Joback Method
vc	0.723	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	471.14	J/molxK	646.76	Joback Method
cpg	485.89	J/molxK	682.18	Joback Method
cpg	499.79	J/molxK	717.59	Joback Method
cpg	512.83	J/molxK	753.01	Joback Method
cpg	525.05	J/molxK	788.43	Joback Method
cpg	536.46	J/molxK	823.84	Joback Method
cpg	547.07	J/molxK	859.26	Joback Method
dvisc	0.0014216	Paxs	374.81	Joback Method

dvisc	0.0007896	Paxs	420.13	Joback Method
dvisc	0.0004918	Paxs	465.46	Joback Method
dvisc	0.0003332	Paxs	510.78	Joback Method
dvisc	0.0002405	Paxs	556.11	Joback Method
dvisc	0.0001823	Paxs	601.43	Joback Method
dvisc	0.0001437	Paxs	646.76	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U370124&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

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