

1,3-Dichloroisopropyl decanoate

Inchi:	InChI=1S/C13H24Cl2O2/c1-3-4-5-6-7-8-9-10-12(16)17-13(2,15)11-14/h3-11H2,1-2H3
InchiKey:	OJZYAPDBIXEVEU-UHFFFAOYSA-N
Formula:	C13H24Cl2O2
SMILES:	CCCCCCCCC(=O)OC(C)(Cl)CCl
Mol. weight [g/mol]:	283.23

Physical Properties

Property code	Value	Unit	Source
gf	-196.36	kJ/mol	Joback Method
hf	-596.68	kJ/mol	Joback Method
hfus	33.19	kJ/mol	Joback Method
hvap	61.16	kJ/mol	Joback Method
log10ws	-5.04		Crippen Method
logp	4.864		Crippen Method
mcvol	225.950	ml/mol	McGowan Method
pc	1632.49	kPa	Joback Method
rinpol	1810.00		NIST Webbook
tb	644.76	K	Joback Method
tc	830.74	K	Joback Method
tf	370.69	K	Joback Method
vc	0.875	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	581.96	J/molxK	644.76	Joback Method
cpg	597.36	J/molxK	675.76	Joback Method
cpg	611.95	J/molxK	706.75	Joback Method
cpg	625.76	J/molxK	737.75	Joback Method
cpg	638.82	J/molxK	768.75	Joback Method
cpg	651.16	J/molxK	799.75	Joback Method
cpg	662.80	J/molxK	830.74	Joback Method
dvisc	0.0021650	Paxs	370.69	Joback Method
dvisc	0.0010374	Paxs	416.37	Joback Method

dvisc	0.0005749	Paxs	462.05	Joback Method
dvisc	0.0003543	Paxs	507.73	Joback Method
dvisc	0.0002365	Paxs	553.40	Joback Method
dvisc	0.0001679	Paxs	599.08	Joback Method
dvisc	0.0001251	Paxs	644.76	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R150220&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

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