

2-Methylpropionic acid, 3,4-dichlorophenyl ester

Inchi:	InChI=1S/C10H10Cl2O2/c1-6(2)10(13)14-7-3-4-8(11)9(12)5-7/h3-6H,1-2H3
InchiKey:	ZCWLUOCBBNEMPS-UHFFFAOYSA-N
Formula:	C10H10Cl2O2
SMILES:	CC(C)C(=O)Oc1ccc(Cl)c(Cl)c1
Mol. weight [g/mol]:	233.09

Physical Properties

Property code	Value	Unit	Source
gf	-133.75	kJ/mol	Joback Method
hf	-317.70	kJ/mol	Joback Method
hfus	22.58	kJ/mol	Joback Method
hvap	58.99	kJ/mol	Joback Method
log10ws	-3.75		Crippen Method
logp	3.555		Crippen Method
mcvol	159.920	ml/mol	McGowan Method
pc	2778.85	kPa	Joback Method
rinsol	1526.00		NIST Webbook
tb	615.55	K	Joback Method
tc	843.20	K	Joback Method
tf	370.92	K	Joback Method
vc	0.604	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.65	J/molxK	615.55	Joback Method
cpg	361.35	J/molxK	653.49	Joback Method
cpg	372.30	J/molxK	691.43	Joback Method
cpg	382.52	J/molxK	729.37	Joback Method
cpg	392.02	J/molxK	767.32	Joback Method
cpg	400.81	J/molxK	805.26	Joback Method
cpg	408.90	J/molxK	843.20	Joback Method
dvisc	0.0014623	Paxs	370.92	Joback Method
dvisc	0.0008731	Paxs	411.69	Joback Method

dvisc	0.0005720	Paxs	452.46	Joback Method
dvisc	0.0004019	Paxs	493.24	Joback Method
dvisc	0.0002981	Paxs	534.01	Joback Method
dvisc	0.0002306	Paxs	574.78	Joback Method
dvisc	0.0001846	Paxs	615.55	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308019&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

Latest version available from:

<https://www.chemeo.com/cid/68-120-3/2-Methylpropionic-acid-3-4-dichlorophenyl-ester.pdf>

Generated by Cheméo on 2024-04-29 04:34:57.884299254 +0000 UTC m=+16654546.804876569.

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