

Dichloroacetic acid, hexyl ester

Other names:	1-Hexanol, dichloroacetate Hexyl dichloroacetate
Inchi:	InChI=1S/C8H14Cl2O2/c1-2-3-4-5-6-12-8(11)7(9)10/h7H,2-6H2,1H3
InchiKey:	WZSTYEOGVNOGKU-UHFFFAOYSA-N
Formula:	C8H14Cl2O2
SMILES:	CCCCCOC(=O)C(Cl)Cl
Mol. weight [g/mol]:	213.10
CAS:	37079-04-2

Physical Properties

Property code	Value	Unit	Source
gf	-243.74	kJ/mol	Joback Method
hf	-490.01	kJ/mol	Joback Method
hfus	24.13	kJ/mol	Joback Method
hvap	50.94	kJ/mol	Joback Method
log10ws	-2.95		Crippen Method
logp	2.914		Crippen Method
mcvol	155.500	ml/mol	McGowan Method
pc	2485.07	kPa	Joback Method
rinpol	1278.00		NIST Webbook
rinpol	1267.00		NIST Webbook
rinpol	1298.00		NIST Webbook
rinpol	1260.00		NIST Webbook
rinpol	1285.50		NIST Webbook
rinpol	1270.00		NIST Webbook
rinpol	1270.00		NIST Webbook
rinpol	1273.00		NIST Webbook
rinpol	1268.00		NIST Webbook
rinpol	1270.00		NIST Webbook
ripol	1749.00		NIST Webbook
ripol	1751.00		NIST Webbook
ripol	1759.00		NIST Webbook
tb	533.15	K	Joback Method
tc	722.96	K	Joback Method
tf	296.92	K	Joback Method
vc	0.600	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	334.71	J/molxK	533.15	Joback Method
cpg	346.37	J/molxK	564.79	Joback Method
cpg	357.50	J/molxK	596.42	Joback Method
cpg	368.12	J/molxK	628.06	Joback Method
cpg	378.23	J/molxK	659.69	Joback Method
cpg	387.84	J/molxK	691.33	Joback Method
cpg	396.95	J/molxK	722.96	Joback Method
dvisc	0.0035993	Paxs	296.92	Joback Method
dvisc	0.0017614	Paxs	336.29	Joback Method
dvisc	0.0010012	Paxs	375.66	Joback Method
dvisc	0.0006335	Paxs	415.03	Joback Method
dvisc	0.0004339	Paxs	454.41	Joback Method
dvisc	0.0003157	Paxs	493.78	Joback Method
dvisc	0.0002408	Paxs	533.15	Joback Method

Sources

NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C37079042&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
ripol:	Non-polar retention indices
ripol:	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.cheméo.com/cid/23-272-4/Dichloroacetic-acid-hexyl-ester.pdf>

Generated by Cheméo on 2024-04-27 03:07:57.92474615 +0000 UTC m=+16476526.845323462.

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