

Benzenemethanol, «alpha»-(trichloromethyl)-, acetate

Other names:	Rosacetol «alpha»-(Trichloromethyl)benzyl acetate Acetic acid, «alpha»-(trichloromethyl)benzyl ester Benzyl alcohol, «alpha»-(trichloromethyl)-, acetate Rose crystals Trichlor phenyl methyl carbinyl acetate Trichloromethylphenylcarbinyl acetate Rose ester Rosephenone 2,2,2-Trichloro-1-phenylethyl acetate Benzenemethanol, «alpha»-(trichloromethyl)-, 1-acetate 2-Acetoxy-1,1,1-trichloro-2-phenylethane Crystal rose Rosetone Rosone NSC 165582 Rose acetate
Inchi:	InChI=1S/C10H9Cl3O2/c1-7(14)15-9(10(11,12)13)8-5-3-2-4-6-8/h2-6,9H,1H3
InchiKey:	JKRWZLOCPLZZEI-UHFFFAOYSA-N
Formula:	C10H9Cl3O2
SMILES:	CC(=O)OC(c1ccccc1)C(Cl)(Cl)Cl
Mol. weight [g/mol]:	267.54
CAS:	90-17-5

Physical Properties

Property code	Value	Unit	Source
gf	-123.58	kJ/mol	Joback Method
hf	-319.25	kJ/mol	Joback Method
hfus	20.14	kJ/mol	Joback Method
hvap	60.76	kJ/mol	Joback Method
log10ws	-3.99		Crippen Method
logp	3.661		Crippen Method
mcvol	172.160	ml/mol	McGowan Method
pc	2814.34	kPa	Joback Method
rinpol	1522.00		NIST Webbook
rinpol	1541.30		NIST Webbook
rinpol	1538.00		NIST Webbook

ripol	1538.00		NIST Webbook
ripol	2172.00		NIST Webbook
ripol	2172.00		NIST Webbook
ripol	2222.00		NIST Webbook
tb	639.79	K	Joback Method
tc	882.99	K	Joback Method
tf	378.22	K	Joback Method
vc	0.641	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	378.66	J/mol×K	639.79	Joback Method
cpg	390.28	J/mol×K	680.32	Joback Method
cpg	400.87	J/mol×K	720.86	Joback Method
cpg	410.49	J/mol×K	761.39	Joback Method
cpg	419.21	J/mol×K	801.92	Joback Method
cpg	427.09	J/mol×K	842.46	Joback Method
cpg	434.21	J/mol×K	882.99	Joback Method
dvisc	0.0021411	Paxs	378.22	Joback Method
dvisc	0.0010974	Paxs	421.81	Joback Method
dvisc	0.0006375	Paxs	465.41	Joback Method
dvisc	0.0004064	Paxs	509.00	Joback Method
dvisc	0.0002782	Paxs	552.60	Joback Method
dvisc	0.0002013	Paxs	596.19	Joback Method
dvisc	0.0001522	Paxs	639.79	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=C90175&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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