

Triphenylmethane, 3,4,4'-trichloro

Inchi:	InChI=1S/C19H13Cl3/c20-16-9-6-14(7-10-16)19(13-4-2-1-3-5-13)15-8-11-17(21)18(22)1
InchiKey:	DDBWUHZEWVZYIN-UHFFFAOYSA-N
Formula:	C19H13Cl3
SMILES:	Clc1ccc(C(c2ccccc2)c2ccc(Cl)c(Cl)c2)cc1
Mol. weight [g/mol]:	347.67

Physical Properties

Property code	Value	Unit	Source
gf	379.21	kJ/mol	Joback Method
hf	187.19	kJ/mol	Joback Method
hfus	34.99	kJ/mol	Joback Method
hvap	79.47	kJ/mol	Joback Method
log10ws	-7.31		Crippen Method
logp	6.827		Crippen Method
mcvol	244.010	ml/mol	McGowan Method
pc	2071.76	kPa	Joback Method
rinpola	416.00		NIST Webbook
rinpola	416.00		NIST Webbook
tb	840.95	K	Joback Method
tc	1115.16	K	Joback Method
tf	495.47	K	Joback Method
vc	0.916	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	618.86	J/molxK	840.95	Joback Method
cpg	632.31	J/molxK	886.65	Joback Method
cpg	644.43	J/molxK	932.35	Joback Method
cpg	655.35	J/molxK	978.06	Joback Method
cpg	665.21	J/molxK	1023.76	Joback Method
cpg	674.16	J/molxK	1069.46	Joback Method
cpg	682.33	J/molxK	1115.16	Joback Method
dvisc	0.0006656	Paxs	495.47	Joback Method

dvisc	0.0003856	Paxs	553.05	Joback Method
dvisc	0.0002476	Paxs	610.63	Joback Method
dvisc	0.0001716	Paxs	668.21	Joback Method
dvisc	0.0001261	Paxs	725.79	Joback Method
dvisc	0.0000969	Paxs	783.37	Joback Method
dvisc	0.0000772	Paxs	840.95	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=R396268&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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