

# Methane-d, trichloro-

<b>Other names:</b>	Trichloromethane-d Deuteriochloroform (2H)chloroform Trichloromethane-d1
<b>Inchi:</b>	InChI=1S/CHCl3/c2-1(3)4/h1H/i1D
<b>InchiKey:</b>	HEDRZPFGACZZDS-MICDWDOJSA-N
<b>Formula:</b>	CDCl3
<b>SMILES:</b>	C1C(Cl)Cl
<b>Mol. weight [g/mol]:</b>	120.38
<b>CAS:</b>	865-49-6

## Physical Properties

Property code	Value	Unit	Source
gf	-80.69	kJ/mol	Joback Method
hf	-116.47	kJ/mol	Joback Method
hfus	7.41	kJ/mol	Joback Method
hvap	30.59	kJ/mol	Joback Method
log10ws	-1.80		Crippen Method
logp	1.986		Crippen Method
mcvol	61.670	ml/mol	McGowan Method
pc	4980.35	kPa	Joback Method
tb	334.13	K	Joback Method
tc	532.11	K	Joback Method
tf	175.79	K	Joback Method
vc	0.233	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	71.18	J/molxK	334.13	Joback Method
cpg	73.44	J/molxK	367.13	Joback Method
cpg	75.56	J/molxK	400.12	Joback Method
cpg	77.54	J/molxK	433.12	Joback Method
cpg	79.40	J/molxK	466.12	Joback Method

cpg	81.13	J/mol×K	499.12	Joback Method
cpg	82.74	J/mol×K	532.11	Joback Method
dvisc	0.0053309	Paxs	175.79	Joback Method
dvisc	0.0026206	Paxs	202.18	Joback Method
dvisc	0.0015178	Paxs	228.57	Joback Method
dvisc	0.0009843	Paxs	254.96	Joback Method
dvisc	0.0006923	Paxs	281.35	Joback Method
dvisc	0.0005173	Paxs	307.74	Joback Method
dvisc	0.0004047	Paxs	334.13	Joback Method

## Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C865496&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C865496&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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