1-Propene, 3,3',3''-[methylidynetris(oxy)]tris-

Other names:	Orthoformic acid, triallyl ester
	Triallyl orthoformate
	Tris(allyloxy)methane
	3,3',3''-[methylidynetris(oxy)]trispropene
Inchi:	InChI=1S/C10H16O3/c1-4-7-11-10(12-8-5-2)13-9-6-3/h4-6,10H,1-3,7-9H2
InchiKey:	OGRORDCCINVZKC-UHFFFAOYSA-N
Formula:	C10H16O3
SMILES:	C=CCOC(OCC=C)OCC=C
Mol. weight [g/mol]:	184.23
CAS:	16754-50-0

Physical Properties

Property code	Value	Unit	Source
gf	-20.60	kJ/mol	Joback Method
hf	-275.38	kJ/mol	Joback Method
hfus	17.86	kJ/mol	Joback Method
hvap	42.69	kJ/mol	Joback Method
ie	9.80 ± 0.07	eV	NIST Webbook
log10ws	-1.93		Crippen Method
logp	1.878		Crippen Method
mcvol	156.470	ml/mol	McGowan Method
pc	2278.41	kPa	Joback Method
tb	485.06	K	Joback Method
tc	660.14	K	Joback Method
tf	248.87	K	Joback Method
vc	0.587	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	342.56	J/mol×K	485.06	Joback Method
cpg	403.31	J/mol×K	630.96	Joback Method
cpg	392.07	J/mol×K	601.78	Joback Method
cpg	380.38	J/mol×K	572.60	Joback Method

cpg	368.23	J/mol×K	543.42	Joback Method
cpg	355.62	J/mol×K	514.24	Joback Method
cpg	414.09	J/mol×K	660.14	Joback Method
dvisc	0.0001384	Pa×s	485.06	Joback Method
dvisc	0.0001805	Pa×s	445.70	Joback Method
dvisc	0.0002480	Pa×s	406.33	Joback Method
dvisc	0.0003647	Pa×s	366.97	Joback Method
dvisc	0.0005884	Pa×s	327.60	Joback Method
dvisc	0.0010817	Pa×s	288.24	Joback Method
dvisc	0.0024111	Pa×s	248.87	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C16754500&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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