2-Propanol, 1,1',1''-nitrilotris-

Other names:	1,1',1''-Nitrilotri-2-propanol
	1,1',1''-Nitrilotris[2-propanol]
	1,1',1''-nitrilotripropan-2-ol
	2-Propanol, 1,1',1''-nitrilotri-
	3,3',3''-Nitrilotri(2-propanol)
	NSC 4010
	TIPA
	Tri-2-propanolamine
	Tris(2-hydroxy-1-propyl)amine
	Tris(2-hydroxypropyl)amine
	Tris(2-propanol)amine
	Trisisopropanolamine
	triisopropanolamine
	tris-(2-hydroxypropyl)amine
Inchi:	InChI=1S/C9H21NO3/c1-7(11)4-10(5-8(2)12)6-9(3)13/h7-9,11-13H,4-6H2,1-3H3
InchiKey:	SLINHMUFWFWBMU-UHFFFAOYSA-N
Formula:	C9H21NO3
SMILES:	CC(O)CN(CC(C)O)CC(C)O
Mol. weight [g/mol]:	191.27
CAS:	122-20-3

Physical Properties

Property code	Value	Unit	Source
gf	-282.10	kJ/mol	Joback Method
hf	-634.09	kJ/mol	Joback Method
hfus	23.78	kJ/mol	Joback Method
hvap	86.54	kJ/mol	Joback Method
log10ws	-0.29		Crippen Method
logp	-0.569		Crippen Method
mcvol	165.260	ml/mol	McGowan Method
pc	3142.03	kPa	Joback Method
tb	578.15	K	NIST Webbook
tc	857.90	K	Joback Method
tf	361.12	K	Joback Method
vc	0.597	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	486.30	J/mol×K	692.98	Joback Method
cpg	496.86	J/mol×K	720.47	Joback Method
cpg	506.92	J/mol×K	747.95	Joback Method
cpg	516.49	J/mol×K	775.44	Joback Method
cpg	525.61	J/mol×K	802.93	Joback Method
cpg	534.28	J/mol×K	830.41	Joback Method
cpg	542.54	J/mol×K	857.90	Joback Method
hvapt	73.70	kJ/mol	500.50	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	463.20	K	3.10	NIST Webbook

Datasets

Viscosity, Pa*s

Temperature, K - Liquid	Pressure, kPa - Liquid	Viscosity, Pa*s - Liquid
323.15	101.33	0.1323000

Reference *https://www.doi.org/10.1021/je300938w*

Sources

Densities, Viscosities, and Refractive Indices of Aqueous Alkanolamine Solutions as Potential Carbon Dioxide Removal Reagents: https://www.doi.org/10.1021/je300938w

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=C122203&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
hvapt:	Enthalpy of vaporization at a given temperature
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume