Benzene, 1,1',1''-(1-propanyl-3-ylidene)tris-

Other names: Propane, 1,1,3-triphenyl-
1,1,3-Triphenylpropane
Inchi: InChI=1S/C21H20/c1-4-10-18(11-5-1)16-17-21(19-12-6-2-7-13-19)20-14-8-3-9-15-20/h1-
InchiKey: NNUULSMRBTWJKR-UHFFFAOYSA-N
Formula: C21H20
SMILES: c1ccc(CCC(c2ccccc2)c2ccccc2)cc1
Mol. weight [g/mol]: 272.38
CAS: 19120-39-9

Physical Properties

Property code	Value	Unit	Source
gf	460.73	kJ/mol	Joback Method
hf	227.54	kJ/mol	Joback Method
hfus	28.75	kJ/mol	Joback Method
hvap	68.78	kJ/mol	Joback Method
log10ws	-5.99		Crippen Method
logp	5.451		Crippen Method
mcvol	235.470	ml/mol	McGowan Method
pc	2005.50	kPa	Joback Method
tb	759.48	K	Joback Method
tc	1015.41	K	Joback Method
tf	320.00 ± 2.00	K	NIST Webbook
vc	0.881	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	659.97	J/mol×K	759.48	Joback Method
cpg	739.83	J/mol×K	972.76	Joback Method
cpg	726.61	J/mol×K	930.10	Joback Method
cpg	712.15	J/mol×K	887.45	Joback Method
cpg	696.33	J/mol×K	844.79	Joback Method
cpg	678.98	J/mol×K	802.14	Joback Method
cpg	751.97	J/mol×K	1015.41	Joback Method

dvisc	0.0000823	Pa×s	759.48	Joback Method
dvisc	0.0001090	Pa×s	698.02	Joback Method
dvisc	0.0001524	Pa×s	636.55	Joback Method
dvisc	0.0002291	Pa×s	575.09	Joback Method
dvisc	0.0003795	Pa×s	513.62	Joback Method
dvisc	0.0007212	Pa×s	452.16	Joback Method
dvisc	0.0016773	Pa×s	390.69	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19120399&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
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