Benzene, 1,3,5-tris(1-methylpropyl)-

Other names: Benzene, 1,3,5-tri-sec-butyl-
1,3,5-Tri-sec-butylbenzene
1,3,5-Tri-s-butylbenzene
Inchi: InChI=1S/C18H30/c1-7-13(4)16-10-17(14(5)8-2)12-18(11-16)15(6)9-3/h10-15H,7-9H2,1-
InchiKey: LNCLJYZMKXSECB-UHFFFAOYSA-N
Formula: C18H30
SMILES: CCC(C)c1cc(C(C)CC)cc(C(C)CC)c1
Mol. weight [g/mol]: 246.43
CAS: 6565-55-5

Physical Properties

Property code	Value	Unit	Source
gf	186.51	kJ/mol	Joback Method
hf	-217.10	kJ/mol	Joback Method
hfus	25.07	kJ/mol	Joback Method
hvap	58.10	kJ/mol	Joback Method
log10ws	-6.28		Crippen Method
logp	6.227		Crippen Method
mcvol	240.720	ml/mol	McGowan Method
pc	1455.68	kPa	Joback Method
tb	646.56	K	Joback Method
tc	843.63	K	Joback Method
tf	299.08	K	Joback Method
vc	0.917	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	655.31	J/mol×K	646.56	Joback Method
cpg	747.40	J/mol×K	810.78	Joback Method
cpg	730.99	J/mol×K	777.94	Joback Method
cpg	713.62	J/mol×K	745.09	Joback Method
cpg	695.24	J/mol×K	712.25	Joback Method
cpg	675.81	J/mol×K	679.40	Joback Method

cpg	762.88	J/mol×K	843.63	Joback Method
dvisc	0.0000966	Pa×s	646.56	Joback Method
dvisc	0.0001320	Pa×s	588.65	Joback Method
dvisc	0.0001930	Pa×s	530.73	Joback Method
dvisc	0.0003097	Pa×s	472.82	Joback Method
dvisc	0.0005672	Pa×s	414.91	Joback Method
dvisc	0.0012641	Pa×s	356.99	Joback Method
dvisc	0.0038426	Pa×s	299.08	Joback Method

Sources

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=C6565555&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
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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