Benzene, 1,1'-(3-methylbutylidene)bis-

Other names: Butane, 3-methyl-1,1-diphenyl-
3-Methyl-1,1-diphenylbutane
Inchi: InChI=1S/C17H20/c1-14(2)13-17(15-9-5-3-6-10-15)16-11-7-4-8-12-16/h3-12,14,17H,13H
InchiKey: VLMDOKCOURAQDR-UHFFFAOYSA-N
Formula: C17H20
SMILES: CC(C)CC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 224.34
CAS: 26466-27-3

Physical Properties

Property code	Value	Unit	Source
gf	312.20	kJ/mol	Joback Method
hf	68.29	kJ/mol	Joback Method
hfus	20.82	kJ/mol	Joback Method
hvap	57.21	kJ/mol	Joback Method
log10ws	-4.97		Crippen Method
logp	4.865		Crippen Method
mcvol	202.870	ml/mol	McGowan Method
pc	2119.73	kPa	Joback Method
tb	578.15 ± 2.00	K	NIST Webbook
tc	876.01	K	Joback Method
tf	304.19	K	Joback Method
vc	0.759	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	525.29	J/mol×K	640.84	Joback Method
cpg	545.18	J/mol×K	680.04	Joback Method
cpg	563.60	J/mol×K	719.23	Joback Method
cpg	580.64	J/mol×K	758.43	Joback Method
cpg	596.39	J/mol×K	797.62	Joback Method
cpg	610.93	J/mol×K	836.82	Joback Method
cpg	624.34	J/mol×K	876.01	Joback Method

dvisc	0.0041006	Pa×s	304.19	Joback Method
dvisc	0.0014330	Pa×s	360.30	Joback Method
dvisc	0.0006648	Pa×s	416.41	Joback Method
dvisc	0.0003701	Pa×s	472.51	Joback Method
dvisc	0.0002334	Pa×s	528.62	Joback Method
dvisc	0.0001607	Pa×s	584.73	Joback Method
dvisc	0.0001182	Pa×s	640.84	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C26466273&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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