Naphthalene, 2,6-bis(1,1-dimethylethyl)-

Other names: Naphthalene, 2,6-di-tert-butyl-
2,6-Di-tert-butylnaphthalene
Inchi: InChI=1S/C18H24/c1-17(2,3)15-9-7-14-12-16(18(4,5)6)10-8-13(14)11-15/h7-12H,1-6H3
InchiKey: TZGXZNWUOXLMFL-UHFFFAOYSA-N
Formula: C18H24
SMILES: CC(C)(C)c1ccc2cc(C(C)(C)C)ccc2c1
Mol. weight [g/mol]: 240.38
CAS: 3905-64-4

Physical Properties

Property code	Value	Unit	Source
gf	306.16	kJ/mol	Joback Method
hf	-27.69	kJ/mol	Joback Method
hfus	17.83	kJ/mol	Joback Method
hvap	58.31	kJ/mol	Joback Method
log10ws	-5.90		Crippen Method
logp	5.435		Crippen Method
mcvol	221.260	ml/mol	McGowan Method
pc	1792.42	kPa	Joback Method
tb	603.00 ± 25.00	K	NIST Webbook
tc	893.08	K	Joback Method
tf	419.00 ± 4.00	K	NIST Webbook
vc	0.836	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	600.68	J/mol×K	660.40	Joback Method
cpg	620.51	J/mol×K	699.18	Joback Method
cpg	638.89	J/mol×K	737.96	Joback Method
cpg	655.94	J/mol×K	776.74	Joback Method
cpg	671.81	J/mol×K	815.52	Joback Method
cpg	686.64	J/mol×K	854.30	Joback Method
cpg	700.58	J/mol×K	893.08	Joback Method

dvisc	0.0016138	Pa×s	381.62	Joback Method
dvisc	0.0008831	Pa×s	428.08	Joback Method
dvisc	0.0005438	Pa×s	474.55	Joback Method
dvisc	0.0003651	Pa×s	521.01	Joback Method
dvisc	0.0002617	Pa×s	567.47	Joback Method
dvisc	0.0001973	Pa×s	613.94	Joback Method
dvisc	0.0001547	Pa×s	660.40	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3905644&Units=SI

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