Naphthalene, 2,6-dimethyl-3-octyl-

Other names: 2,6-Dimethyl-3-n-octylnaphthalene
2,6-Dimethyl-3-octylnaphthalene
Inchi: InChI=1S/C20H28/c1-4-5-6-7-8-9-10-18-15-20-13-16(2)11-12-19(20)14-17(18)3/h11-15H
InchiKey: UZHLPUVYQFPPMF-UHFFFAOYSA-N
Formula: C20H28
SMILES: CCCCCCCCc1cc2cc(C)ccc2cc1C
Mol. weight [g/mol]: 268.44
CAS: 55000-54-9

Physical Properties

Property code	Value	Unit	Source
gf	307.69	kJ/mol	Joback Method
hf	-62.94	kJ/mol	Joback Method
hfus	37.45	kJ/mol	Joback Method
hvap	66.02	kJ/mol	Joback Method
log10ws	-7.54		Crippen Method
logp	6.360		Crippen Method
mcvol	249.440	ml/mol	McGowan Method
pc	1471.36	kPa	Joback Method
tb	717.60	K	Joback Method
tc	921.62	K	Joback Method
tf	411.84	K	Joback Method
vc	0.970	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	705.79	J/mol×K	717.60	Joback Method
cpg	789.03	J/mol×K	887.62	Joback Method
cpg	774.21	J/mol×K	853.62	Joback Method
cpg	758.53	J/mol×K	819.61	Joback Method
cpg	741.94	J/mol×K	785.61	Joback Method
cpg	724.38	J/mol×K	751.60	Joback Method
cpg	803.06	J/mol×K	921.62	Joback Method

dvisc	0.0001778	Pa×s	717.60	Joback Method
dvisc	0.0002148	Pa×s	666.64	Joback Method
dvisc	0.0002678	Pa×s	615.68	Joback Method
dvisc	0.0003474	Pa×s	564.72	Joback Method
dvisc	0.0004746	Pa×s	513.76	Joback Method
dvisc	0.0006944	Pa×s	462.80	Joback Method
dvisc	0.0011164	Pa×s	411.84	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55000549&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