1-Phenyl-2-(2-naphthyl)ethylene, trans

Inchi: InChI=1S/C18H14/c1-2-7-15(8-3-1)13-14-17-11-6-10-16-9-4-5-12-18(16)17/h1-14H/b14-
InchiKey: QAVDMWIHZMXKFR-BUHFOSPRSA-N
Formula: C18H14
SMILES: C(=Cc1cccc2ccccc12)c1ccccc1
Mol. weight [g/mol]: 230.30

Physical Properties

Property code	Value	Unit	Source
gf	502.74	kJ/mol	Joback Method
hf	355.03	kJ/mol	Joback Method
hfus	27.29	kJ/mol	Joback Method
hvap	62.47	kJ/mol	Joback Method
log10ws	-5.88		Crippen Method
logp	5.010		Crippen Method
mcvol	193.200	ml/mol	McGowan Method
pc	2495.01	kPa	Joback Method
rinpol	2410.00		NIST Webbook
rinpol	2410.00		NIST Webbook
rinpol	2410.00		NIST Webbook
tb	692.72	K	Joback Method
tc	953.97	K	Joback Method
tf	385.60	K	Joback Method
vc	0.730	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	492.15	J/mol×K	692.72	Joback Method
cpg	509.00	J/mol×K	736.26	Joback Method
cpg	524.40	J/mol×K	779.80	Joback Method
cpg	538.53	J/mol×K	823.34	Joback Method
cpg	551.57	J/mol×K	866.89	Joback Method
cpg	563.69	J/mol×K	910.43	Joback Method
cpg	575.08	J/mol×K	953.97	Joback Method

dvisc	0.0013402	Pa×s	385.60	Joback Method
dvisc	0.0007995	Pa×s	436.79	Joback Method
dvisc	0.0005316	Pa×s	487.97	Joback Method
dvisc	0.0003819	Pa×s	539.16	Joback Method
dvisc	0.0002906	Pa×s	590.35	Joback Method
dvisc	0.0002309	Pa×s	641.53	Joback Method
dvisc	0.0001899	Pa×s	692.72	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=R525263&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume