1,2-bis-(2-Naphthyl)ethylene, trans

Inchi: InChI=1S/C22H16/c1-3-7-21-15-17(11-13-19(21)5-1)9-10-18-12-14-20-6-2-4-8-22(20)16-
InchiKey: JOYUAZDDXKUTIY-MDZDMXLPSA-N
Formula: C22H16
SMILES: C(=Cc1ccc2ccccc2c1)c1ccc2ccccc2c1
Mol. weight [g/mol]: 280.36

Physical Properties

Property code	Value	Unit	Source
gf	633.44	kJ/mol	Joback Method
hf	452.07	kJ/mol	Joback Method
hfus	34.28	kJ/mol	Joback Method
hvap	73.68	kJ/mol	Joback Method
log10ws	-7.69		Crippen Method
logp	6.163		Crippen Method
mcvol	230.100	ml/mol	McGowan Method
pc	2151.31	kPa	Joback Method
rinpol	2930.00		NIST Webbook
rinpol	3000.00		NIST Webbook
rinpol	3010.00		NIST Webbook
rinpol	2960.00		NIST Webbook
rinpol	2930.00		NIST Webbook
rinpol	3000.00		NIST Webbook
rinpol	3010.00		NIST Webbook
rinpol	2960.00		NIST Webbook
tb	808.20	K	Joback Method
tc	1075.85	K	Joback Method
tf	475.90	K	Joback Method
vc	0.875	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	636.16	J/mol×K	808.20	Joback Method
cpg	708.26	J/mol×K	1031.24	Joback Method

cpg	695.07	J/mol×K	986.63	Joback Method
cpg	681.51	J/mol×K	942.03	Joback Method
cpg	667.34	J/mol×K	897.42	Joback Method
cpg	652.30	J/mol×K	852.81	Joback Method
cpg	721.33	J/mol×K	1075.85	Joback Method
dvisc	0.0002565	Pa×s	808.20	Joback Method
dvisc	0.0003001	Pa×s	752.82	Joback Method
dvisc	0.0003601	Pa×s	697.43	Joback Method
dvisc	0.0004459	Pa×s	642.05	Joback Method
dvisc	0.0005748	Pa×s	586.67	Joback Method
dvisc	0.0007813	Pa×s	531.28	Joback Method
dvisc	0.0011407	Pa×s	475.90	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=R525194&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