NAPHTHALENE, 2,2'-OXYBIS-

Other names: Naphthalene, 2,2'-oxybis-
di-2-naphthyl ether
Inchi: InChI=1S/C20H14O/c1-3-7-17-13-19(11-9-15(17)5-1)21-20-12-10-16-6-2-4-8-18(16)14-2
InchiKey: DZRLNYVDCIYXPG-UHFFFAOYSA-N
Formula: C20H14O
SMILES: c1ccc2cc(Oc3ccc4ccccc4c3)ccc2c1
Mol. weight [g/mol]: 270.33

Physical Properties

Property code	Value	Unit	Source
af	0.6326		Cheméo Relay (1.0)
gf	431.38	kJ/mol	Joback Method
hf	199.85	kJ/mol	Cheméo Relay (1.0)
hfus	30.09	kJ/mol	Joback Method
hvap	115.53	kJ/mol	Cheméo Relay (1.0)
ie	7.46	eV	Cheméo Relay (1.0)
log10ws	-7.87		Cheméo Relay (1.0)
logp	5.785		Crippen Method
mcvol	212.090	ml/mol	McGowan Method
pc	2419.50	kPa	Joback Method
tb	719.14	K	Cheméo Relay (1.0)
tc	1034.50	K	Cheméo Relay (1.0)
tf	455.89	K	Cheméo Relay (1.0)
vc	0.791	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	578.85	J/mol×K	780.70	Joback Method
cpg	656.24	J/mol×K	1045.77	Joback Method
cpg	645.35	J/mol×K	1001.60	Joback Method
cpg	633.89	J/mol×K	957.42	Joback Method
cpg	621.69	J/mol×K	913.24	Joback Method
cpg	608.56	J/mol×K	869.06	Joback Method

cpg	594.34	J/mol×K	824.88	Joback Method
dvisc	0.0004653	Pa×s	630.69	Joback Method
dvisc	0.0002785	Pa×s	780.70	Joback Method
dvisc	0.0003228	Pa×s	730.70	Joback Method
dvisc	0.0003824	Pa×s	680.69	Joback Method
dvisc	0.0010712	Pa×s	480.67	Joback Method
dvisc	0.0005857	Pa×s	580.68	Joback Method
dvisc	0.0007699	Pa×s	530.68	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C613809&Units=SI

Legend

af:	Acentric Factor
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
ie:	Ionization energy
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