Fumaric acid, naphth-2-yl naphth-2-ylmethyl ester

Inchi: InChI=1S/C25H18O4/c26-24(28-17-18-9-10-19-5-1-3-7-21(19)15-18)13-14-25(27)29-23-
InchiKey: VMJFICAIDQTWSE-BUHFOSPRSA-N
Formula: C25H18O4
SMILES: O=C(C=CC(=O)Oc1ccc2ccccc2c1)OCc1ccc2ccccc2c1
Mol. weight [g/mol]: 382.41

Physical Properties

Property code	Value	Unit	Source
gf	190.86	kJ/mol	Joback Method
hf	-99.45	kJ/mol	Joback Method
hfus	47.62	kJ/mol	Joback Method
hvap	98.67	kJ/mol	Joback Method
log10ws	-7.48		Crippen Method
logp	5.198		Crippen Method
mcvol	287.250	ml/mol	McGowan Method
pc	1807.70	kPa	Joback Method
rinpol	3397.00		NIST Webbook
rinpol	3397.00		NIST Webbook
tb	1029.42	K	Joback Method
tc	1285.93	K	Joback Method
tf	654.03	K	Joback Method
vc	1.091	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	877.94	J/mol×K	1029.42	Joback Method
cpg	935.93	J/mol×K	1243.18	Joback Method
cpg	924.91	J/mol×K	1200.43	Joback Method
cpg	913.78	J/mol×K	1157.68	Joback Method
cpg	902.35	J/mol×K	1114.92	Joback Method
cpg	890.46	J/mol×K	1072.17	Joback Method
cpg	947.00	J/mol×K	1285.93	Joback Method
dvisc	0.0001118	Pa×s	1029.42	Joback Method

dvisc	0.0001329	Pa×s	966.86	Joback Method
dvisc	0.0001618	Pa×s	904.29	Joback Method
dvisc	0.0002027	Pa×s	841.73	Joback Method
dvisc	0.0002635	Pa×s	779.16	Joback Method
dvisc	0.0003584	Pa×s	716.60	Joback Method
dvisc	0.0005171	Pa×s	654.03	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=U405838&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