Phenylacetic acid, 2-naphthyl ester

Inchi: InChI=1S/C18H14O2/c19-18(12-14-6-2-1-3-7-14)20-17-11-10-15-8-4-5-9-16(15)13-17/h1
InchiKey: GOALADUJAUGWAQ-UHFFFAOYSA-N
Formula: C18H14O2
SMILES: O=C(Cc1ccccc1)Oc1ccc2ccccc2c1
Mol. weight [g/mol]: 262.30

Physical Properties

Property code	Value	Unit	Source
gf	188.60	kJ/mol	Joback Method
hf	-6.99	kJ/mol	Joback Method
hfus	29.88	kJ/mol	Joback Method
hvap	71.67	kJ/mol	Joback Method
log10ws	-5.20		Crippen Method
logp	3.988		Crippen Method
mcvol	204.940	ml/mol	McGowan Method
pc	2480.12	kPa	Joback Method
rinpol	2285.00		NIST Webbook
rinpol	2285.00		NIST Webbook
tb	764.85	K	Joback Method
tc	1016.15	K	Joback Method
tf	462.84	K	Joback Method
vc	0.773	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	556.38	J/mol×K	764.85	Joback Method
cpg	571.16	J/mol×K	806.73	Joback Method
cpg	584.66	J/mol×K	848.62	Joback Method
cpg	597.01	J/mol×K	890.50	Joback Method
cpg	608.31	J/mol×K	932.38	Joback Method
cpg	618.67	J/mol×K	974.26	Joback Method
cpg	628.19	J/mol×K	1016.15	Joback Method
dvisc	0.0010869	Pa×s	462.84	Joback Method

dvisc	0.0006978	Pa×s	513.18	Joback Method
dvisc	0.0004848	Pa×s	563.51	Joback Method
dvisc	0.0003576	Pa×s	613.85	Joback Method
dvisc	0.0002762	Pa×s	664.18	Joback Method
dvisc	0.0002213	Pa×s	714.52	Joback Method
dvisc	0.0001825	Pa×s	764.85	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U307537&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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