3-Cyclopentylpropionic acid, 2-naphthyl ester

Inchi: InChI=1S/C18H20O2/c19-18(12-9-14-5-1-2-6-14)20-17-11-10-15-7-3-4-8-16(15)13-17/h3
InchiKey: AWDSCFKWFVOHGC-UHFFFAOYSA-N
Formula: C18H20O2
SMILES: O=C(CCC1CCCC1)Oc1ccc2ccccc2c1
Mol. weight [g/mol]: 268.35

Physical Properties

Property code	Value	Unit	Source
gf	112.74	kJ/mol	Joback Method
hf	-183.04	kJ/mol	Joback Method
hfus	29.77	kJ/mol	Joback Method
hvap	69.65	kJ/mol	Joback Method
log10ws	-5.75		Crippen Method
logp	4.716		Crippen Method
mcvol	217.840	ml/mol	McGowan Method
pc	2145.33	kPa	Joback Method
rinpol	2298.00		NIST Webbook
tb	753.45	K	Joback Method
tc	990.80	K	Joback Method
tf	447.32	K	Joback Method
vc	0.823	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	635.60	J/mol×K	753.45	Joback Method
cpg	653.37	J/mol×K	793.01	Joback Method
cpg	669.79	J/mol×K	832.57	Joback Method
cpg	684.94	J/mol×K	872.12	Joback Method
cpg	698.93	J/mol×K	911.68	Joback Method
cpg	711.84	J/mol×K	951.24	Joback Method
cpg	723.78	J/mol×K	990.80	Joback Method
dvisc	0.0015637	Pa×s	447.32	Joback Method
dvisc	0.0009964	Pa×s	498.34	Joback Method

dvisc	0.0006903	Pa×s	549.36	Joback Method
dvisc	0.0005091	Pa×s	600.38	Joback Method
dvisc	0.0003937	Pa×s	651.41	Joback Method
dvisc	0.0003161	Pa×s	702.43	Joback Method
dvisc	0.0002615	Pa×s	753.45	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U307137&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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