

Isophthalic acid, 4-cyanophenyl hexyl ester

Inchi: InChI=1S/C21H21NO4/c1-2-3-4-5-13-25-20(23)17-7-6-8-18(14-17)21(24)26-19-11-9-16(10)
InchiKey: JTBHLZKQPIPDTK-UHFFFAOYSA-N
Formula: C21H21NO4
SMILES: CCCCCCOC(=O)c1cccc(C(=O)Oc2ccc(C#N)cc2)c1
Mol. weight [g/mol]: 351.40

Physical Properties

Property code	Value	Unit	Source
gf	-3.16	kJ/mol	Joback Method
hf	-351.37	kJ/mol	Joback Method
hfus	44.53	kJ/mol	Joback Method
hvap	97.01	kJ/mol	Joback Method
log10ws	-6.25		Crippen Method
logp	4.515		Crippen Method
mvol	275.490	ml/mol	McGowan Method
pc	1556.12	kPa	Joback Method
rinpol	3047.00		NIST Webbook
rinpol	3047.00		NIST Webbook
tb	997.86	K	Joback Method
tc	1234.42	K	Joback Method
tf	613.62	K	Joback Method
vc	1.069	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	850.53	J/mol×K	997.86	Joback Method
cpg	860.93	J/mol×K	1037.29	Joback Method
cpg	870.00	J/mol×K	1076.71	Joback Method
cpg	877.79	J/mol×K	1116.14	Joback Method
cpg	884.33	J/mol×K	1155.57	Joback Method
cpg	889.66	J/mol×K	1195.00	Joback Method
cpg	893.81	J/mol×K	1234.42	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=U344492&Units=SI

Legend

cpg:	Ideal gas heat capacity
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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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