

4-Cyanobenzoic acid, hexyl ester

Inchi: InChI=1S/C14H17NO2/c1-2-3-4-5-10-17-14(16)13-8-6-12(11-15)7-9-13/h6-9H,2-5,10H2,
InchiKey: GDAPFQSPDUEQRI-UHFFFAOYSA-N
Formula: C14H17NO2
SMILES: CCCCCCOC(=O)c1ccc(C#N)cc1
Mol. weight [g/mol]: 231.29

Physical Properties

Property code	Value	Unit	Source
gf	69.04	kJ/mol	Joback Method
hf	-187.15	kJ/mol	Joback Method
hfus	29.96	kJ/mol	Joback Method
hvap	69.33	kJ/mol	Joback Method
log10ws	-4.16		Crippen Method
logp	3.295		Crippen Method
mvol	193.180	ml/mol	McGowan Method
pc	2019.95	kPa	Joback Method
rinpol	1800.00		NIST Webbook
rinpol	1800.00		NIST Webbook
tb	729.75	K	Joback Method
tc	943.44	K	Joback Method
tf	423.63	K	Joback Method
vc	0.761	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	523.77	J/mol×K	729.75	Joback Method
cpg	537.08	J/mol×K	765.36	Joback Method
cpg	549.52	J/mol×K	800.98	Joback Method
cpg	561.10	J/mol×K	836.59	Joback Method
cpg	571.87	J/mol×K	872.21	Joback Method
cpg	581.82	J/mol×K	907.82	Joback Method
cpg	591.00	J/mol×K	943.44	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U299831&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
h vap:	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
r in pol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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