Hexacosane-4,6-dione

Inchi: InChI=1S/C26H50O2/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-23-26(28)24
InchiKey: LKWRCPGXXLRXFP-UHFFFAOYSA-N
Formula: C26H50O2
SMILES: CCCCCCCCCCCCCCCCCCCCCC(=O)CC(=O)CCC
Mol. weight [g/mol]: 394.67

Physical Properties

Property code	Value	Unit	Source
gf	-89.80	kJ/mol	Joback Method
hf	-805.13	kJ/mol	Joback Method
hfus	66.29	kJ/mol	Joback Method
hvap	86.96	kJ/mol	Joback Method
log10ws	-9.27		Crippen Method
logp	8.747		Crippen Method
mcvol	380.340	ml/mol	McGowan Method
pc	776.77	kPa	Joback Method
rinpol	2896.20		NIST Webbook
rinpol	2896.20		NIST Webbook
tb	902.02	K	Joback Method
tc	1106.23	K	Joback Method
tf	482.64	K	Joback Method
vc	1.504	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1279.48	J/mol×K	902.02	Joback Method
cpg	1301.28	J/mol×K	936.06	Joback Method
cpg	1321.76	J/mol×K	970.09	Joback Method
cpg	1341.00	J/mol×K	1004.13	Joback Method
cpg	1359.06	J/mol×K	1038.16	Joback Method
cpg	1376.00	J/mol×K	1072.20	Joback Method
cpg	1391.90	J/mol×K	1106.23	Joback Method
dvisc	0.0009082	Pa×s	482.64	Joback Method

dvisc	0.0003874	Pa×s	552.54	Joback Method
dvisc	0.0002001	Pa×s	622.43	Joback Method
dvisc	0.0001181	Pa×s	692.33	Joback Method
dvisc	0.0000768	Pa×s	762.23	Joback Method
dvisc	0.0000536	Pa×s	832.12	Joback Method
dvisc	0.0000396	Pa×s	902.02	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U413390&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

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