

Tetracosanyl formate

Inchi:	InChI=1S/C25H50O2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24
InchiKey:	QTEHJNWMBFAIT-UHFFFAOYSA-N
Formula:	C25H50O2
SMILES:	CCCCCCCCCCCCCCCCCCCCCCCCCOC=O
Mol. weight [g/mol]:	382.66

Physical Properties

Property code	Value	Unit	Source
gf	-44.90	kJ/mol	Joback Method
hf	-777.13	kJ/mol	Joback Method
hfus	63.98	kJ/mol	Joback Method
hvap	80.37	kJ/mol	Joback Method
log10ws	-9.15		Crippen Method
logp	8.762		Crippen Method
mvol	370.550	ml/mol	McGowan Method
pc	788.60	kPa	Joback Method
rinpol	2728.00		NIST Webbook
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tb	842.48	K	Joback Method
tc	1031.99	K	Joback Method
tf	435.74	K	Joback Method
vc	1.470	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1218.97	J/molxK	842.48	Joback Method
cpg	1241.27	J/molxK	874.06	Joback Method
cpg	1262.34	J/molxK	905.65	Joback Method
cpg	1282.22	J/molxK	937.23	Joback Method
cpg	1300.96	J/molxK	968.82	Joback Method
cpg	1318.60	J/molxK	1000.40	Joback Method
cpg	1335.18	J/molxK	1031.99	Joback Method
dvisc	0.0010996	Paxs	435.74	Joback Method

dvisc	0.0004380	Paxs	503.53	Joback Method
dvisc	0.0002171	Paxs	571.32	Joback Method
dvisc	0.0001248	Paxs	639.11	Joback Method
dvisc	0.0000798	Paxs	706.90	Joback Method
dvisc	0.0000552	Paxs	774.69	Joback Method
dvisc	0.0000405	Paxs	842.48	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R543796&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
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

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