

2-Methoxyethyl stearate

Inchi:	InChI=1S/C21H42O3/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-21(22)24-20-19-23-2
InchiKey:	WWFMRRQOYPKLIM-UHFFFAOYSA-N
Formula:	C21H42O3
SMILES:	CCCCCCCCCCCCCCCCC(=O)OCCOC
Mol. weight [g/mol]:	342.56
CAS:	111-09-1

Physical Properties

Property code	Value	Unit	Source
gf	-212.98	kJ/mol	Joback Method
hf	-853.79	kJ/mol	Joback Method
hfus	54.12	kJ/mol	Joback Method
hvap	73.91	kJ/mol	Joback Method
log10ws	-6.56		Crippen Method
logp	6.438		Crippen Method
mcvol	320.060	ml/mol	McGowan Method
pc	973.52	kPa	Joback Method
rinpol	2374.00		NIST Webbook
tb	778.59	K	Joback Method
tc	955.33	K	Joback Method
tf	420.82	K	Joback Method
vc	1.254	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1002.70	J/molxK	778.59	Joback Method
cpg	1022.68	J/molxK	808.05	Joback Method
cpg	1041.64	J/molxK	837.50	Joback Method
cpg	1059.60	J/molxK	866.96	Joback Method
cpg	1076.58	J/molxK	896.41	Joback Method
cpg	1092.59	J/molxK	925.87	Joback Method
cpg	1107.66	J/molxK	955.33	Joback Method
dvisc	0.0010020	Paxs	420.82	Joback Method

dvisc	0.0004416	Paxs	480.45	Joback Method
dvisc	0.0002332	Paxs	540.08	Joback Method
dvisc	0.0001398	Paxs	599.70	Joback Method
dvisc	0.0000920	Paxs	659.33	Joback Method
dvisc	0.0000649	Paxs	718.96	Joback Method
dvisc	0.0000482	Paxs	778.59	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=C111091&Units=SI

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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