Ethyl tetracosyl ether

Inchi: InChI=1S/C26H54O/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-2
InchiKey: WVRDEOUCRCHKRV-UHFFFAOYSA-N
Formula: C26H54O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCOCC
Mol. weight [g/mol]: 382.71

Physical Properties

Property code	Value	Unit	Source
gf	63.04	kJ/mol	Joback Method
hf	-712.19	kJ/mol	Joback Method
hfus	64.28	kJ/mol	Joback Method
hvap	75.88	kJ/mol	Joback Method
log10ws	-9.79		Crippen Method
logp	9.625		Crippen Method
mcvol	383.070	ml/mol	McGowan Method
pc	718.37	kPa	Joback Method
rinpol	2690.00		NIST Webbook
tb	816.70	K	Joback Method
tc	1000.19	K	Joback Method
tf	405.01	K	Joback Method
vc	1.510	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1252.62	J/mol×K	816.70	Joback Method
cpg	1276.69	J/mol×K	847.28	Joback Method
cpg	1299.51	J/mol×K	877.86	Joback Method
cpg	1321.15	J/mol×K	908.44	Joback Method
cpg	1341.63	J/mol×K	939.02	Joback Method
cpg	1361.00	J/mol×K	969.61	Joback Method
cpg	1379.30	J/mol×K	1000.19	Joback Method
dvisc	0.0011802	Pa×s	405.01	Joback Method
dvisc	0.0004212	Pa×s	473.62	Joback Method

dvisc	0.0001951	Pa×s	542.24	Joback Method
dvisc	0.0001074	Pa×s	610.86	Joback Method
dvisc	0.0000667	Pa×s	679.47	Joback Method
dvisc	0.0000452	Pa×s	748.09	Joback Method
dvisc	0.0000327	Pa×s	816.70	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U406368&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

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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