Carbonic acid, 2-methoxyethyl 2-ethylhexyl ester

Inchi: InChI=1S/C12H24O4/c1-4-6-7-11(5-2)10-16-12(13)15-9-8-14-3/h11H,4-10H2,1-3H3
InchiKey: RIGSYMLFBGNOPA-UHFFFAOYSA-N
Formula: C12H24O4
SMILES: CCCCC(CC)COC(=O)OCCOC
Mol. weight [g/mol]: 232.32

Physical Properties

Property code	Value	Unit	Source
gf	-396.20	kJ/mol	Joback Method
hf	-805.53	kJ/mol	Joback Method
hfus	28.48	kJ/mol	Joback Method
hvap	55.89	kJ/mol	Joback Method
log10ws	-2.62		Crippen Method
logp	3.002		Crippen Method
mcvol	199.120	ml/mol	McGowan Method
pc	1810.77	kPa	Joback Method
rinpol	1525.00		NIST Webbook
tb	594.65	K	Joback Method
tc	766.74	K	Joback Method
tf	326.62	K	Joback Method
vc	0.761	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	520.38	J/mol×K	594.65	Joback Method
cpg	535.96	J/mol×K	623.33	Joback Method
cpg	550.96	J/mol×K	652.01	Joback Method
cpg	565.35	J/mol×K	680.69	Joback Method
cpg	579.14	J/mol×K	709.38	Joback Method
cpg	592.33	J/mol×K	738.06	Joback Method
cpg	604.89	J/mol×K	766.74	Joback Method
dvisc	0.0019812	Pa×s	326.62	Joback Method
dvisc	0.0009172	Pa×s	371.29	Joback Method

dvisc	0.0005010	Pa×s	415.96	Joback Method
dvisc	0.0003077	Pa×s	460.63	Joback Method
dvisc	0.0002060	Pa×s	505.31	Joback Method
dvisc	0.0001472	Pa×s	549.98	Joback Method
dvisc	0.0001107	Pa×s	594.65	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U357869&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