2-[2-[2-[2-[2-[2-[2-[2-[2-[2-[2-[2-(2-Methoxyethoxy)e
acetate

Other names: Tridecaethylene glycol monomethyl ether, acetate
3,6,9,12,15,18,21,24,27,30,33,36,39-Tridecaoxatetracont-1-yl acetate

Inchi: InChI=1S/C29H58O15/c1-29(30)44-28-27-43-26-25-42-24-23-41-22-21-40-20-19-39-18-

InchiKey: OGUYMHYMIPZMFA-UHFFFAOYSA-N

Formula: C29H58O15

SMILES: COCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOC(C)=O

Mol. weight [g/mol]: 646.76

Physical Properties

Property code	Value	Unit	Source
gf	-1405.62	kJ/mol	Joback Method
hf	-2605.55	kJ/mol	Joback Method
hfus	89.10	kJ/mol	Joback Method
hvap	120.63	kJ/mol	Joback Method
log10ws	1.04		Crippen Method
logp	0.395		Crippen Method
mcvol	503.220	ml/mol	McGowan Method
pc	573.15	kPa	Joback Method
rinpol	4096.70		NIST Webbook
rinpol	4096.70		NIST Webbook
tb	1230.67	K	Joback Method
tc	1708.03	K	Joback Method
tf	777.74	K	Joback Method
vc	1.917	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1816.90	J/mol×K	1230.67	Joback Method
cpg	1486.95	J/mol×K	1628.47	Joback Method
cpg	1601.83	J/mol×K	1548.91	Joback Method
cpg	1690.93	J/mol×K	1469.35	Joback Method
cpg	1755.58	J/mol×K	1389.79	Joback Method
cpg	1797.12	J/mol×K	1310.23	Joback Method

cpg	1344.96	J/mol×K	1708.03	Joback Method
dvisc	0.0000003	Pa×s	1230.67	Joback Method
dvisc	0.0000004	Pa×s	1155.18	Joback Method
dvisc	0.0000005	Pa×s	1079.69	Joback Method
dvisc	0.0000007	Pa×s	1004.21	Joback Method
dvisc	0.0000011	Pa×s	928.72	Joback Method
dvisc	0.0000018	Pa×s	853.23	Joback Method
dvisc	0.0000031	Pa×s	777.74	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=U351920&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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