2-[2-[2-[2-[2-[2-[2-[2-(2-Methoxyethoxy)ethoxy]eth
acetate

Other names: Nonaethylene glycol monomethyl ether, acetate
3,6,9,12,15,18,21,24,27-Nonaoxaoctacos-1-yl acetate

Inchi: InChI=1S/C21H42O11/c1-21(22)32-20-19-31-18-17-30-16-15-29-14-13-28-12-11-27-10-9

InchiKey: YQDFJTJDQRFNQF-UHFFFAOYSA-N

Formula: C21H42O11

SMILES: COCCOCCOCCOCCOCCOCCOCCOCCOCCOC(C)=O

Mol. weight [g/mol]: 470.55

Physical Properties

Property code	Value	Unit	Source
gf	-1052.98	kJ/mol	Joback Method
hf	-1911.55	kJ/mol	Joback Method
hfus	63.62	kJ/mol	Joback Method
hvap	93.19	kJ/mol	Joback Method
log10ws	0.74		Crippen Method
logp	0.329		Crippen Method
mcvol	367.020	ml/mol	McGowan Method
pc	895.87	kPa	Joback Method
rinpol	3018.70		NIST Webbook
rinpol	3018.70		NIST Webbook
tb	957.95	K	Joback Method
tc	1185.05	K	Joback Method
tf	598.66	K	Joback Method
vc	1.397	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1258.12	J/mol×K	957.95	Joback Method
cpg	1314.74	J/mol×K	1147.20	Joback Method
cpg	1309.22	J/mol×K	1109.35	Joback Method
cpg	1300.70	J/mol×K	1071.50	Joback Method
cpg	1289.27	J/mol×K	1033.65	Joback Method
cpg	1275.04	J/mol×K	995.80	Joback Method

cpg	1317.15	J/mol×K	1185.05	Joback Method
dvisc	0.0000043	Pa×s	957.95	Joback Method
dvisc	0.0000056	Pa×s	898.07	Joback Method
dvisc	0.0000075	Pa×s	838.19	Joback Method
dvisc	0.0000106	Pa×s	778.31	Joback Method
dvisc	0.0000159	Pa×s	718.42	Joback Method
dvisc	0.0000255	Pa×s	658.54	Joback Method
dvisc	0.0000451	Pa×s	598.66	Joback Method

Sources

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=U351918&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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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