2-[2-[2-[2-[2-[2-[2-(2-Acetyloxyethoxy)ethoxy]etho
acetate

Other names: Octaethylene glycol, diacetate
25-Oxo-3,6,9,12,15,18,21,24-octaoxahexacos-1-yl acetate

Inchi: InChI=1S/C20H38O11/c1-19(21)30-17-15-28-13-11-26-9-7-24-5-3-23-4-6-25-8-10-27-12

InchiKey: JAKKRKPLYKUQGS-UHFFFAOYSA-N

Formula: C20H38O11

SMILES: CC(=O)OCCOCCOCCOCCOCCOCCOCCOCCOC(C)=O

Mol. weight [g/mol]: 454.51

Physical Properties

Property code	Value	Unit	Source
gf	-1085.32	kJ/mol	Joback Method
hf	-1871.27	kJ/mol	Joback Method
hfus	61.45	kJ/mol	Joback Method
hvap	95.30	kJ/mol	Joback Method
log10ws	0.47		Crippen Method
logp	0.229		Crippen Method
mcvol	348.630	ml/mol	McGowan Method
pc	998.28	kPa	Joback Method
rinpol	2905.30		NIST Webbook
rinpol	2902.00		NIST Webbook
rinpol	2903.00		NIST Webbook
rinpol	2899.00		NIST Webbook
tb	966.52	K	Joback Method
tc	1191.56	K	Joback Method
tf	615.09	K	Joback Method
vc	1.329	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1182.32	J/mol×K	966.52	Joback Method
cpg	1230.73	J/mol×K	1154.06	Joback Method
cpg	1226.39	J/mol×K	1116.55	Joback Method
cpg	1219.29	J/mol×K	1079.04	Joback Method

cpg	1209.51	J/mol×K	1041.53	Joback Method
cpg	1197.16	J/mol×K	1004.03	Joback Method
cpg	1232.23	J/mol×K	1191.56	Joback Method
dvisc	0.0000064	Pa×s	966.52	Joback Method
dvisc	0.0000082	Pa×s	907.95	Joback Method
dvisc	0.0000109	Pa×s	849.38	Joback Method
dvisc	0.0000152	Pa×s	790.81	Joback Method
dvisc	0.0000223	Pa×s	732.23	Joback Method
dvisc	0.0000350	Pa×s	673.66	Joback Method
dvisc	0.0000597	Pa×s	615.09	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=U351906&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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