

Laminaribiose, permethyl

Inchi:	InChI=1S/C19H36O11/c1-20-9-10-11(21-2)12(22-3)14(23-4)19(28-10)29-13-15(24-5)17(
InchiKey:	QTKZSCCEFWDSLC-BDDBJPTBSA-N
Formula:	C19H36O11
SMILES:	COCC1OC(OC2C(OC)C(OC)OC(OC)C2OC)C(OC)C(OC)C1OC
Mol. weight [g/mol]:	440.48

Physical Properties

Property code	Value	Unit	Source
gf	-1020.92	kJ/mol	Joback Method
hf	-1943.55	kJ/mol	Joback Method
hfus	63.85	kJ/mol	Joback Method
hvap	86.98	kJ/mol	Joback Method
log10ws	-0.13		Crippen Method
logp	-0.207		Crippen Method
mcvol	321.420	ml/mol	McGowan Method
pc	1063.10	kPa	Joback Method
rinpol	2306.00		NIST Webbook
rinpol	2306.00		NIST Webbook
tb	891.54	K	Joback Method
tc	1096.01	K	Joback Method
tf	537.94	K	Joback Method
vc	1.161	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1176.29	J/molxK	891.54	Joback Method
cpg	1245.84	J/molxK	1061.93	Joback Method
cpg	1237.50	J/molxK	1027.85	Joback Method
cpg	1226.26	J/molxK	993.77	Joback Method
cpg	1212.22	J/molxK	959.70	Joback Method
cpg	1195.53	J/molxK	925.62	Joback Method
cpg	1251.16	J/molxK	1096.01	Joback Method
dvisc	0.0000564	Paxs	891.54	Joback Method

dvisc	0.0000657	Paxs	832.61	Joback Method
dvisc	0.0000783	Paxs	773.67	Joback Method
dvisc	0.0000961	Paxs	714.74	Joback Method
dvisc	0.0001223	Paxs	655.81	Joback Method
dvisc	0.0001633	Paxs	596.87	Joback Method
dvisc	0.0002322	Paxs	537.94	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R151134&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
log_p:	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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