(Z)-3-(Heptadec-10-en-1-yl)phenol

Inchi: InChI=1S/C23H38O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-18-22-19-17-20-23(24)21-
InchiKey: BIEZSEGUHJMPKG-FPLPWBNLSA-N
Formula: C23H38O
SMILES: CCCCCCC=CCCCCCCCCCc1cccc(O)c1
Mol. weight [g/mol]: 330.55
CAS: 111047-33-7

Physical Properties

Property code	Value	Unit	Source
gf	180.79	kJ/mol	Joback Method
hf	-341.61	kJ/mol	Joback Method
hfus	55.35	kJ/mol	Joback Method
hvap	82.04	kJ/mol	Joback Method
log10ws	-7.95		Crippen Method
logp	7.582		Crippen Method
mcvol	312.740	ml/mol	McGowan Method
pc	1194.00	kPa	Joback Method
rinpol	2703.50		NIST Webbook
tb	837.10	K	Joback Method
tc	1035.72	K	Joback Method
tf	482.03	K	Joback Method
vc	1.161	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	991.85	J/mol×K	837.10	Joback Method
cpg	1011.03	J/mol×K	870.20	Joback Method
cpg	1029.38	J/mol×K	903.31	Joback Method
cpg	1047.01	J/mol×K	936.41	Joback Method
cpg	1064.03	J/mol×K	969.51	Joback Method
cpg	1080.52	J/mol×K	1002.62	Joback Method
cpg	1096.60	J/mol×K	1035.72	Joback Method
dvisc	0.0002440	Pa×s	482.03	Joback Method

dvisc	0.0000785	Pa×s	541.21	Joback Method
dvisc	0.0000316	Pa×s	600.39	Joback Method
dvisc	0.0000150	Pa×s	659.57	Joback Method
dvisc	0.0000080	Pa×s	718.74	Joback Method
dvisc	0.0000047	Pa×s	777.92	Joback Method
dvisc	0.0000030	Pa×s	837.10	Joback Method

Sources

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=C111047337&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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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