

Benzophenone, 2-hydroxy-4,4'-bis(tetradecyloxy)-

Inchi:	InChI=1S/C41H66O4/c1-3-5-7-9-11-13-15-17-19-21-23-25-33-44-37-29-27-36(28-30-37)
InchiKey:	PWLOGFRFMVCPNW-UHFFFAOYSA-N
Formula:	C41H66O4
SMILES:	CCCCCCCCCCCCCOc1ccc(C(=O)c2ccc(OCCCCCCCCCCCCC)cc2O)cc1
Mol. weight [g/mol]:	622.96

Physical Properties

Property code	Value	Unit	Source
gf	6.36	kJ/mol	Joback Method
hf	-993.78	kJ/mol	Joback Method
hfus	99.01	kJ/mol	Joback Method
hvap	137.32	kJ/mol	Joback Method
log10ws	-14.10		Crippen Method
logp	12.783		Crippen Method
mcvol	560.210	ml/mol	McGowan Method
pc	529.93	kPa	Joback Method
tb	1380.13	K	Joback Method
tc	1844.18	K	Joback Method
tf	835.82	K	Joback Method
vc	2.123	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2173.00	J/molxK	1380.13	Joback Method
cpg	2211.19	J/molxK	1457.47	Joback Method
cpg	2249.41	J/molxK	1534.81	Joback Method
cpg	2289.02	J/molxK	1612.15	Joback Method
cpg	2331.40	J/molxK	1689.49	Joback Method
cpg	2377.90	J/molxK	1766.84	Joback Method
cpg	2429.89	J/molxK	1844.18	Joback Method
dvisc	0.0000012	Paxs	835.82	Joback Method
dvisc	0.0000005	Paxs	926.54	Joback Method
dvisc	0.0000003	Paxs	1017.26	Joback Method

dvisc	0.0000001	Paxs	1107.97	Joback Method
dvisc	9.0829288e-08	Paxs	1198.69	Joback Method
dvisc	5.9739582e-08	Paxs	1289.41	Joback Method
dvisc	4.1516433e-08	Paxs	1380.13	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=B6000752&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
hvac:	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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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