

(1R,2S,3R)-1,4-Bis(benzo[d][1,3]dioxol-5-yl)-2,3-di

Inchi:	InChI=1S/C20H22O5/c1-12(7-14-3-5-16-18(8-14)24-10-22-16)13(2)20(21)15-4-6-17-19(9
InchiKey:	SDXLCXZRXXWAGW-UHFFFAOYSA-N
Formula:	C20H22O5
SMILES:	CC(Cc1ccc2c(c1)OCO2)C(C)C(O)c1ccc2c(c1)OCO2
Mol. weight [g/mol]:	342.39
CAS:	111786-59-5

Physical Properties

Property code	Value	Unit	Source
gf	-47.88	kJ/mol	Joback Method
hf	-538.74	kJ/mol	Joback Method
hfus	53.65	kJ/mol	Joback Method
hvap	101.31	kJ/mol	Joback Method
log10ws	-5.22		Crippen Method
logp	3.692		Crippen Method
mvol	252.770	ml/mol	McGowan Method
pc	2204.15	kPa	Joback Method
rinpol	2779.50		NIST Webbook
rinpol	2779.50		NIST Webbook
tb	951.76	K	Joback Method
tc	1185.39	K	Joback Method
tf	584.54	K	Joback Method
vc	0.941	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	829.87	J/molxK	951.76	Joback Method
cpg	843.33	J/molxK	990.70	Joback Method
cpg	856.23	J/molxK	1029.64	Joback Method
cpg	868.72	J/molxK	1068.58	Joback Method
cpg	880.93	J/molxK	1107.52	Joback Method
cpg	893.01	J/molxK	1146.46	Joback Method
cpg	905.10	J/molxK	1185.39	Joback Method

dvisc	0.0006363	Paxs	584.54	Joback Method
dvisc	0.0003189	Paxs	645.74	Joback Method
dvisc	0.0001802	Paxs	706.95	Joback Method
dvisc	0.0001115	Paxs	768.15	Joback Method
dvisc	0.0000740	Paxs	829.35	Joback Method
dvisc	0.0000520	Paxs	890.56	Joback Method
dvisc	0.0000382	Paxs	951.76	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C111786595&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
mvol:	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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