

(R,R)-DIOP

Other names:	(-)-DIOP (-)-1,4-Bis(diphenylphosphino)-2,3-O-isopropylidene-2,3-butanediol (R,R)-DIOP (4R,5R)-4,5-Bis(diphenylphosphinomethyl)-2,2-dimethyl-1,3-dioxolane Phosphine, [(2,2-dimethyl-1,3-dioxolane-4,5-diyl)bis(methylene)]bis[diphenyl-, (4R-trans)- Phosphine, [(2,2-dimethyl-1,3-dioxolane-4,5-diyl)dimethylene]bis[diphenyl-, trans-(-)- (-)-2,2-dimethyl-4,5-((diphenylphosphino)dimethyl)dioxolane (-) 2,3-O-isopropylidene-2,3-dihydroxy-1,4-bis(diphenylphosphino)butane
Inchi:	InChI=1S/C31H32O2P2/c1-31(2)32-29(23-34(25-15-7-3-8-16-25)26-17-9-4-10-18-26)30
InchiKey:	VCHDBLPQYJAQSQ-UHFFFAOYSA-N
Formula:	C31H32O2P2
SMILES:	CC1(C)OC(CP(c2ccccc2)c2ccccc2)C(CP(c2ccccc2)c2ccccc2)O1
Mol. weight [g/mol]:	498.54

Physical Properties

Property code	Value	Unit	Source
logp	5.772		Crippen Method
mcvol	394.410	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	38.61	kJ/mol	229.00	NIST Webbook

Sources

Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C32305989&Units=SI
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

hfust:	Enthalpy of fusion at a given temperature
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume

Latest version available from:

<https://www.chemeo.com/cid/73-617-6/R-R-DIOP.pdf>

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