



Product Information

1,2:5,6-Di-O-isopropylidene-3-O-(methylsulfonyl)- α -D-glucofuranose, Purity $\geq 95\%$

Cat. No.: X25-05-ZQ183

Size: 100 mg; 250 mg; 500 mg; 1 g; 5 g

CAS Number: 5450-26-0

Compound CID: 225084

Synonym: 5450-26-0; [5-(2,2-Dimethyl-1,3-dioxolan-4-yl)-2,2-dimethyl-3a,5,6,6a-tetrahydrofuro[2,3-d][1,3]dioxol-6-yl]methanesulfonate

This product is for research use only and is not intended for diagnostic use.

Product Information

Description	1,2:5,6-Di-O-isopropylidene-3-O-(methylsulfonyl)- α -D-glucofuranose is a protected glucose derivative with isopropylidene and mesyl protecting groups, soluble in organic solvents and a versatile intermediate for nucleophilic substitution reactions.
Molecular Weight	338.38
Molecular Formula	C ₁₃ H ₂₂ O ₈ S
IUPAC Name	(2 <i>R</i> ,3 <i>R</i> ,4 <i>S</i> ,5 <i>R</i>)-2-[6-amino-2-[(4-methylphenyl)methylsulfanyl]purin-9-yl]-5-(hydroxymethyl)oxolane-3,4-diol
InChI	InChI=1S/C18H21N5O4S/c1-9-2-4-10(5-3-9)7-28-18-21-15(19)12-16(22-18)23(8-20-12)17-14(26)13(25)11(6-24)27-17/h2-5,8,11,13-14,17,24-26H,6-7H2,1H3,(H2,19,21,22)/t11-,13-,14-,17-/m1/s1
InChI Key	CNHLXSDJHZQQGY-LSCFUAHRSA-N
Canonical SMILES	<chem>CC1=CC=C(C=C1)CSC2=NC(=C3C(=N2)N(C=N3)[C@H]4[C@@H]([C@@H]([C@H](O4)CO)O)O)N</chem>
Source	Chemical synthesis
Density	1.4 $\pm$ 0.1 g/cm ³
Flash	224.5 $\pm$ 28.7 °C
Form	Solid or powder
Purity	$\geq 95\%$
Solubility	1,2:5,6-Di-O-isopropylidene-3-O-(methylsulfonyl)- α -D-glucofuranose is soluble in water and organic solvents such as DCM, DMF, and DMSO.
Identity	Confirmed by MS/NMR.



Stability	The product is stable for 1 year when stored at the recommended temperature in powder.
Melting Point	79-81 °C
Boiling Point	447.7 ± 45.0 °C at 760 mmHg
Quality Level	Research grade
Applications	1,2:5,6-Di-O-isopropylidene-3-O-(methylsulfonyl)- α -D-glucofuranose is a protected sugar derivative with a leaving group at C-3 for further modification.
Storage	Store at -20°C, protect from light.