

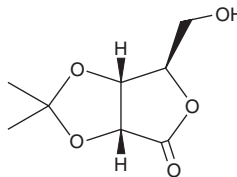
# PRODUCT INFORMATION



## 2,3-Isopropylidene-D-ribonolactone

Item No. 30479

**CAS Registry No.:** 30725-00-9  
**Formal Name:** 2,3-O-(1-methylethylidene)-D-ribonic acid,  $\gamma$ -lactone  
**Synonym:** 2,3-O-Isopropylidene-D-ribonolactone  
**MF:** C<sub>8</sub>H<sub>12</sub>O<sub>5</sub>  
**FW:** 188.2  
**Purity:**  $\geq$ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

2,3-Isopropylidene-D-ribonolactone is supplied as a solid. A stock solution may be made by dissolving the 2,3-isopropylidene-D-ribonolactone in the solvent of choice, which should be purged with an inert gas. 2,3-Isopropylidene-D-ribonolactone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 2,3-isopropylidene-D-ribonolactone in these solvents is approximately 15, 10, and 20 mg/ml, respectively.

2,3-Isopropylidene-D-ribonolactone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2,3-isopropylidene-D-ribonolactone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 2,3-Isopropylidene-D-ribonolactone has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

2,3-Isopropylidene-D-ribonolactone is a building block.<sup>1</sup> It has been used in the stereocontrolled synthesis of the carbohydrates 6-*epi*-trehazolin and 6-*epi*-trehalamine.

### Reference

1. Shiozaki, M., Arai, M., Kobayashi, Y., *et al.* Stereocontrolled syntheses of 6-*epi*-Trehazolin and 6-*epi*-Trehalamine from D-Ribonolactone. *J. Org. Chem.* **59**(16), 4450-4460 (1994).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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