



3050 Spruce Street  
Saint Louis, Missouri 63103 USA  
Telephone 800-325-5832 • (314) 771-5765  
Fax (314) 286-7828  
email: techserv@sial.com  
sigma-aldrich.com

## Product Information

### Sucrose

Product Number **S 0389**  
Store at Room Temperature

#### Product Description

Molecular Formula:  $C_{12}H_{22}O_{11}$   
Molecular Weight: 342.3  
CAS Number: 57-50-1  
Melting point: >160 °C  
Rotation: +66.5 (2.6 %, water, 25 °C)

This product is a disaccharide composed of glucose and fructose, which is used for a variety of applications. It is isolated from cane sugar; it is not synthetic. This product is suitable for molecular biology applications. It is free of DNase, RNase, and protease impurities.

This product can be used to prepare density gradients for cell/organelle separation.<sup>1,2</sup> The refractive index of the solution will be directly related to the density.<sup>2</sup> In addition, sucrose can be used as a supplement in plant, insect, and bacterial culture media. It can also be used in various enzymatic assays.

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

This product is soluble in water (500 mg/ml).

#### Storage/Stability

Solutions can be autoclaved for 15-20 minutes at a maximum of 121 °C. There will be some hydrolysis to glucose and fructose, depending in part on how rapidly the autoclave comes to the required temperature and pressure. Care must be taken to prevent solutions from caramelizing.

#### References

1. Data for Biochemical Research, 3rd ed., Dawson, R. M. C., et al., Oxford University Press (New York, NY: 1986), pp. 545-546.
2. Centrifugation, a Practical Approach, 2nd ed., Rickwood, D., ed., IRL Press (Oxford, UK: 1984) Appendix IV.

CMH/ 12/02

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.