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## Product Information

### Sucrose

Product Number **S 9378**  
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:  $>160\text{ }^{\circ}\text{C}$ <sup>1</sup>  
Rotation:  $+66.5^{\circ}$  (2.6%, water,  $25\text{ }^{\circ}\text{C}$ )<sup>1</sup>

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 can be used to prepare density gradients for cell/organelle separation.<sup>2,3</sup> The refractive index of the solution will be directly related to the density.<sup>1</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  $121\text{ }^{\circ}\text{C}$ . 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. The Merck Index, 12th ed., Entry# 9049, p.1517.
2. Data for Biochemical Research, 3rd ed., Dawson, R. M. C., et al., Oxford University Press (New York, NY: 1986), pp. 545-546.
3. Centrifugation, a Practical Approach, 2nd ed., Rickwood, D., ed., IRL Press (Oxford, UK: 1984) Appendix IV.

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