

# Dextran 40000

Cat# C3014-s – 100 g / C3014 – 500 g

Storage at Room Temp.

## INTRODUCTION

**Dextran** is a complex, branched glucan (polysaccharide made of many glucose molecules) composed of chains of varying lengths (from 3 to 2000 kDa). It is used medicinally as an antithrombotic (anti-platelet), to reduce blood viscosity, and as a volume expander in anemia.

The straight chain consists of  $\alpha$ -1,6 glycosidic linkages between glucose molecules, while branches begin from  $\alpha$ -1,3 linkages. (For information on the numbering of carbon atoms in glucose, see the glucose article.) **Dextran** is synthesized from sucrose by certain lactic-acid bacteria, the best-known being *Leuconostoc mesenteroides* and *Streptococcus mutans*. Dental plaque is rich in dextrans. Dextran is also formed by the lactic acid bacterium *Lactobacillus brevis* to create the crystals of tibicos, a water kefir fermented beverage which supposedly has some health benefits

## INFORMATION

Average Molecular Weight (Gel permeation chromatography): 38,500 Dalton

Below 10,900 Dalton: 10%

Above 99,700 Dalton: 10%

pH: 6.1

Chloride (Cl): <100mg/kg

Nitrogen (N): <30mg/kg

## PRODUCT USE LIMITATION

These products are intended for research use only.