

## Dulcitol

Cat. No. CSUB-0797

Lot. No. (See product label)

### Introduction

**Description** Galactitol (dulcitol) is a sugar alcohol, the reduction product of galactose. In people with galactokinase deficiency, a form of galactosemia, excess dulcitol forms in the lens of the eye leading to cataracts. Galactitol is produced from galactose in a reaction catalyzed by aldose reductase. Galactose itself comes from the metabolism of the disaccharide lactose into glucose and galactose. The other common galactose metabolism defect is a defect in galactose-1-phosphate uridylyltransferase, an autosomal recessive disorder, which also causes a buildup of galactitol as a result of increased concentrations of galactose-1-phosphate and galactose. The toxicity associated with galactose-1-phosphate uridylyltransferase deficiency is associated with symptoms of hepatosplenomegaly and mental retardation in addition to the cataracts caused by galactitol buildup.

**Applications** A sugar alcohol

**Synonyms** Galactitol

### Product Information

**CAS No.** 608-66-2

**Molecular Formula** C<sub>6</sub>H<sub>14</sub>O<sub>6</sub>

**Molecular Weight** 182.17

**Substrates** 5-lipoxygenase

**Refractive Index** 1.49 (Predicted)