Creative Enzymes®

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	C6H14O6
Molecular Weight	182.17
Substrates	5-lipoxygenase
Refractive Index	1.49 (Predicted)