Dextrose

Cat. 1900

Ingredients (Carbohydrates and Glycosides)

Practical information

Aplications	Categories
Carbon source	General use

Industry: Fermentation / Ingredients for culture media

Principles and uses

Dextrose (D-glucose) is a monosaccharide used as a energy source for the cultivation of microorganisms and for fermentation studies. Its empirical formula is C6H12O6.

Dextrose is incorporated into numerous formulations of culture media, such as those used in the selective isolation of Enterobacteriaceae. In liquid media, dextrose is normally used in a concentration of 0,5%, while in solid media it is higher.

This sugar is easily assimilated and allows an increase in the growth and recovery of microorganisms.

The assays have been carried out according to the criteria of the European Pharmacopoeia and USP.

Physical-chemical characteristics

Description	Specification
Conductivity	<20 microS/cm
Soluble starch/sulfites	<15 ppm
Particle size (>500 microns)	<0,1 %
Particle size (>315 microns)	<2 %
Appearance	White or almost white, crystalline powder
Water	<1 %
Heavy metals	<5 ppm
Solubility	Freely soluble in water, very slightly soluble in ethanol (96%)
Appearence of solution	No more color than the control
Glucose	97,5-102,0 %
Maltose and isomaltose	<0,4 %
Maltotriose	<0,2 %
Fructose	<0,15 %
Unspecified impurities	<0,10 %
Total impurities	<0,5 %

Microbiological test

Description	Specification
Aerobios totales	<1000 CFU/g
Hongos y levaduras totales	<100 CFU/g
Salmonella	Negative/10g
Escherichia coli	Negative/1g

Storage

Temp. Min.:2 ºC

Temp. Max.:25 ºC