

## DEXTROSE

Cat. 1900

Others

Dextrose (or D-Glucose) is a simple hexose mono-saccharide sugar. It is so called because it turns the plane of polarization to the right. Entirely derived from corn it is free from all other sugars and starches, proteins, alcohols and heavy metals. It is the natural form of Glucose.

Dextrose is offered at a very high grade of purity. Its empirical formula is  $C_6H_{12}O_6$ .

Mono-saccharides are sweet, water soluble and crystalline.

Appearance - small, white crystals, with molecular weight of 180.2 and specific rotation range is  $+52.6 - 53.2^\circ C$ .

Maximum list of impurities:

Insoluble matter in  $H_2O = 0.01\%$ ; Cl =  $0.0125\%$ ; Sulphate and Sulphite =  $0.0215\%$ ; Heavy Metals (as Pb) =  $0.005\%$ ; As =  $0.001\%$ .

Dextrose is used as a source of energy to cultivate microorganisms and for fermentation studies. Dextrose is incorporated into many culture media formulae, such as those employed in the selective isolation of enterobacteriaceae. In liquid culture media, Dextrose is generally used in a  $0.5\%$  concentration, whereas in solid media formulations it can be used in higher concentrations.

This hexose sugar has a beneficial effect on old cultures of many types of microorganisms because it is easily assimilated. Adding  $0.05\%$  dextrose to a culture medium free of carbohydrates can increase the growth and recovery of many organisms.

## CERTIFIED MALTOSE

Cat. 1904

Maltose is two Glucose molecules joined together through carbons 1 and 4, with a molecular formula of  $C_{12}H_{22}O_{11}$ . Like other carbohydrates, it has a hydrogen to oxygen ratio of 2:1.

Certified Maltose is a pure carbohydrate prepared especially for use in bacterial culture media, mostly for the isolation of yeasts and molds.

Disaccharides are sweet, water soluble and crystalline.

Appearance - small, white crystals, with molecular weight of 360.30.

It is offered at a very high grade of purity. It is free from all other sugars and starches, proteins, alcohols and heavy metals: Cl =  $0.005\%$ ; Sulphate and Sulphite =  $0.01\%$ ; Heavy Metals (as Pb) =  $0.001\%$ .