

# Injectable Grade of Maltose

## General

Maltose is a reducing disaccharide consisting of two glucose molecules linked by an  $\alpha$ -1,4 bond. Maltose is manufactured from starch using enzyme technology.

Historically maltose has been a common disaccharide consumed by humans when assimilated into the body from consuming carbohydrate based foods. More recently, maltose has been used as an excipient for tablets and granulation, and as a carbon source in cell culture medium.

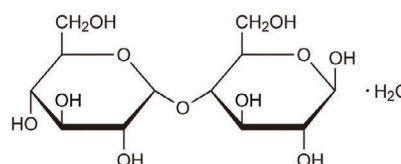
MALTOSE PH is highly purified crystalline maltose monohydrate, and has low endotoxin.

MALTOSE PH is intended for injection and intravenous fluid as energy source etc.

Chemical formula:  $C_{12}H_{22}O_{11} \cdot H_2O$

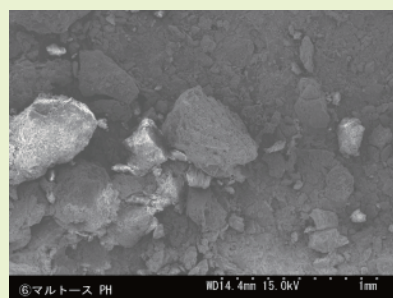
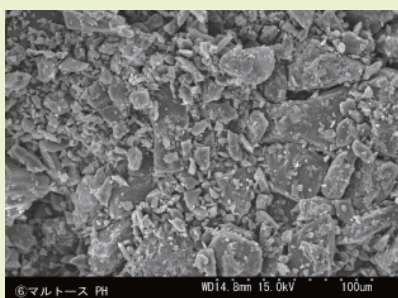
Molecular weight: 360.31

CAS RN®: 6363-53-7



## Properties

- High purity maltose
- Low endotoxin level guaranteed
- Good water solubility (61.9 g/100 g-H<sub>2</sub>O · 20°C)
- Relatively compatible with oils
- The surface tension of a 1% solution is almost the same value as pure water.
- Because it is highly purified, maltose can be used for injection, as an excipient for solid, inhalation and topical formulations, and as a reagent.



Photomicrographs

## Scientific reports

Maltose has been studied and reported also in various non-pharmaceutical applications.


Purpose	Title	Reference
Growth inducer of culture embryo	Breeding of new citrus cultivars by Embryo culture (No.1) Effect of saccharides on embryo growth <i>in vitro</i> .	Bulletin of the Agricultural Research Institute of Kanagawa Prefecture, 133, 75-81 (1991)
Growth inducer of culture plant microspore	Formation of Calli from Isolated Microspore Cultures of Asiatic Hybrid Lily 'Connecticut King'	Journal of the Japanese Society for Horticultural Science, 69(1), 52-56 (2000)
Growth inducer of culture leaf disc	Effects of Sugar on callus and organ formation from leaf segments of Chrysanthemum	Plant Tissue Culture Letters, 3(2), 71-77 (1986)
Growth inducer of culture wheat anther	An efficient anther culture method for obtaining a higher frequency of pollen embryos in <i>Triticum aestivum</i> L.	Bulletin of the RIAR, Ishikawa Agricultural College, 3, 19-25 (1993)
Growth inducer of culture rice anther	Improvement of medium and the use in rice anther culture	Bull. Tokushima. Pref. Agri. Res. Ins., 3, 31-38 (2006)
Improver of productivity of actives from culture cells	Intermittent maltose feeding enhances paclitaxel production in suspension culture of <i>Taxus chinensis</i> cells.	Biotechnol Lett., 22, 22, 1793-1796 (2000)

## Packaging

25 kg (PE bag in carton box)

MANUFACTURER : **Nagase Viita Co., Ltd.**  
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