

PRODUCT INFORMATION



Maltoheptaose

Item No. 20758

CAS Registry No.: 34620-78-5

Formal Name: O- α -D-glucopyranosyl-(1 \rightarrow 4)-O- α -D-glucopyranosyl-(1 \rightarrow 4)-O- α -D-glucopyranosyl-(1 \rightarrow 4)-O- α -D-glucopyranosyl-(1 \rightarrow 4)-O- α -D-glucopyranosyl-(1 \rightarrow 4)-D-glucose

Synonym: Amyloheptaose

MF: C₄₂H₇₂O₃₆

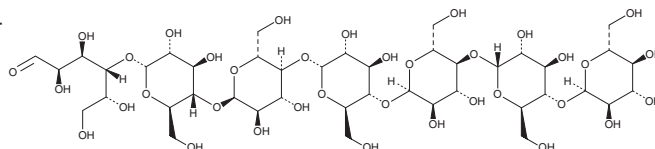
FW: 1,153.0

Purity: \geq 80%

Supplied as: A crystalline solid

Storage: -20°C

Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Maltoheptaose is supplied as a crystalline solid. A stock solution may be made by dissolving the maltoheptaose in the solvent of choice, which should be purged with an inert gas. Maltoheptaose is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of maltoheptaose in these solvents is approximately 20 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of maltoheptaose can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of maltoheptaose in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Maltoheptaose is a maltooligosaccharide consisting of seven glucose units. It has been used as a substrate to study α -amylase transglycosylation activity.¹

Reference

1. Uitdehaag, J.C.M., van Alebeek, G.-J.W.M., van der Veen, B.A., *et al.* Structures of maltohexaose and maltoheptaose bound at the donor sites of cyclodextrin glycosyltransferase give insight into the mechanisms of transglycosylation activity and cyclodextrin size specificity. *Biochemistry* **39(26)**, 7772-7780 (2000).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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