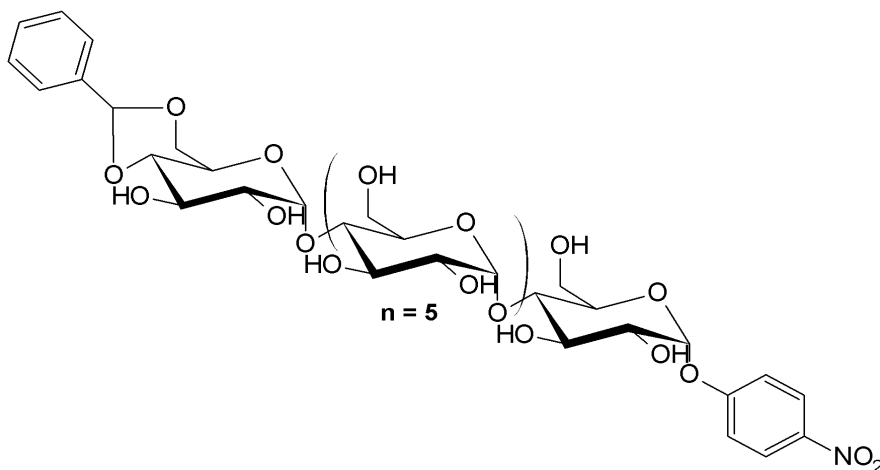


**Blocked 4-nitrophenyl- $\alpha$ -maltoheptaoside (Lot 70101b)**

**O-BPNPC7**

**05/17**

**MW:** 1362.2  
**Molecular Formula:**  $C_{55}H_{79}NO_{38}$   
**CAS:** 109055-07-04  
**Purity:** ~ 98% (HPLC)



**DESCRIPTION:**

Benzylidene blocked 4-nitrophenyl maltoheptaoside (BPNPG7; MW = 1362.2) contains a *p*-nitrophenyl group at the reducing end of maltoheptaoside, and a 4,6-linked-O-benzylidene group at the non-reducing end of the oligomer. This oligomer is a substrate for *endo*-acting  $\alpha$ -amylase, but it is not hydrolysed by *exo*-acting enzymes such as amyloglucosidase,  $\alpha$ -glucosidase or  $\beta$ -amylase.

The substrate as supplied contains 54.5 mg of BPNPG7 per vial (i.e. the same amount as in a vial of “**Amylase HR Assay Reagent**”). The BPNPG7 is ~ 98% pure, with minor contaminants of free 4-nitrophenol (~ 0.14%), 4-nitrophenyl maltopentaoside (~ 0.6%).

**ASSAY OF  $\alpha$ -AMYLASE USING BPNPG7:**

BPNPG7 is used in combination with thermostable  $\alpha$ -glucosidase (**Amylase HR Reagent**) for the assay of cereal, fungal and bacterial  $\alpha$ -amylases.