>>**Entry Name: Maltopentaose,** 8CI
ENTRY UNDER REVIEW
Synonym(s): *O*-α-D-Glucopyranosyl-(1→4)-[*O*-α-D-glucopyranosyl-(1→4)]$_3$-D-glucose, 9CI. Amylopentaose

CAS Registry Number: 34620-76-3
Related CAS Registry Numbers(s): 1668-09-3

As Maltoheptaose, FTV83-F with
n = 3

Molecular Formula: $C_{30}H_{52}O_{26}$
Molecular Weight: 828.725
Accurate Mass: 828.27469
Percentage Composition: C 43.48%; H 6.32%; O 50.20%
Biological Source: Constit. of corn syrup. Amylolysis prod. from starch
Use/Importance: Maltooligosaccharide mixtures are important food additives (sweeteners, gelling agents and viscosity modifiers)
Biological Use/Importance: Synergist for antitumour agents
Physical Description: Cryst. +H_2O
Melting Point: Mp 78° (hydrate)
Optical Rotation: $[\alpha]_D^{25}$+176.4 (c, 1.0 in H_2O)
Solubility: BERDY SOL: Sol. H_2O; fairly sol. EtOH, Me_2CO; poorly sol. EtOAc, hexane
UV: [neutral] λ_{max} (H_2O) (Berdy)

Sigma: M8128
Supelco: 4-7876

References:

Whistler, R.L. *et al.*, *J.A.C.S.*, 1955, **77**, 1017, *(isol)*
Beadle, J.B.*, J. Agric. Food Chem.*, 1969, **17**, 904, *(glc)*
Robyt, J.F. *et al.*, *J. Biol. Chem.*, 1970, **245**, 3917
Friebolin, H. *et al.*, *Makromol. Chem.*, 1976, **177**, 845, *(cmr)*
Moates, G.K. *et al.*, *Carbohydr. Res.*, 1997, **299**, 91-94, *(struct, props)*