



To: Nagase America Corporation

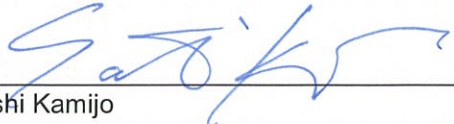
Specifications

PULLULAN

Definition	Neutral simple polysaccharide produced by the growth of <i>Aureobasidium pullulans</i> , consisting of a chain structure of repeated 1,6-binding of maltotriose
INCI name	Pullulan
Storage	Store in a dark and dry place.
Expiry date	Eighteen (18) months from the production date
Package	Polyethylene bag in a carton box (Net 10 kg)

Variables	Specifications
Description	White to yellowish white powder with odorless or slight characteristic odor
Identification	
(1) Viscosity	Dissolve 10 g of a test substance in 100 mL of water with stirring by adding in small portions: a viscous solution is produced.
(2) Reaction with pullulanase	Mix 10 mL of the viscous solution obtained in (1) with 0.1 mL of <i>pullulanase TS</i> , and allow to stand: the solution loses its viscosity.
(3) Reaction with Polyethylene Glycol	To 10 mL of a solution of a test substance (1 in 50) add 2 mL of <i>Polyethylene glycol 600</i> : a white precipitate is formed immediately.
pH	4.5 – 6.5 (10 w/v%)
Purity	
(1) Heavy metals	Not more than 20 ppm, as Pb (1.0 g, Method 2)
(2) Arsenic	Not more than 2 ppm, as As ₂ O ₃ (1.0 g Method 3)
(3) Protein	Not more than 0.3%
Loss on drying	Not more than 8.0% (1 g, in vacuum, 90°C, 6 hrs)
Residue on ignition	Not more than 5.0% (2 g, Method 2)

Note: Unless otherwise prescribed, test methods are in accordance with the general test methods for the Japanese Standards of Quasi-Drug Ingredients.


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