# Pullulanase (Food Grade)

*Cat. No. SUG-003*

*Lot. No.* (See product label)

## Introduction

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| ***Description*** | Pullulanase is produced from excellent strain of Bacillus licheniformis through submerged fermentation and extraction techniques. It can be widely used for industries of starch sugar. Pullulanase shows starch debranching activity and specifically catalyzes the hydrolysis of pullulan, a polysaccharide composed of maltotriose units linked through α-1,6 glycosidic bonds. The enzyme cleaves the α-1,6 glycosidic bond at the branching point and cuts the entire branch from the backbone, giving linear starch as the product. Unlike other debranching enzymes, Pullulanase can cleave most side chains including short ones. Whereas the debranching enzyme shows no activity against side chains containing only 2-3 glucose units. Therefore, pullulanase gives higher yield of linear starch. |
| ***Applications*** | Enzyme for Starch Sugar |
| ***Synonyms*** | Pullulanase; EC 3.2.1.41; limit dextrinase (erroneous); amylopectin 6-glucanohydrolase; debranching enzyme; α-dextrin endo-1,6-α-glucosidase; R-enzyme; pullulan α-1,6-glucanohydrolase; 9075-68-7 |

## Product Information

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| ***Source*** | Bacillus licheniformis |
| ***Form*** | Liquid |
| ***CAS No.*** | 9075-68-7 |
| ***Activity*** | 2000u/ml |
| ***pH Stability*** | 4.0-6.5 |
| ***Optimum pH*** | 4.2-4.6 |
| ***Optimum temperature*** | 40-65°C, favorable at 60°C |
| ***Unit Definition*** | 1 unit of Pullulanase activity equals to the amount of enzyme which can hydrolyze the pullulan polysaccharides to get 1mg of reducing sugar (based on glucose) at 60 °C and pH 4.5 in 1 min. |

## Usage and Packaging

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| ***Package*** | 25kgs/drum, 1.125kgs/drum |

## Storage and Shipping Information

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| ***Storage*** | Should be stored in a cool place avoiding high temperature. Liquid: 3 months at 25°C, activity remain >90%; 6 months, activity remains >80%. Increase dosage after shelf life. |