

PlantPro™ 638MDP

PP638MDP

Features/Benefits

- Highly active in acidic conditions for processing plant proteins in acidic formulations.
- Increases solubility and reduces viscosity, enhancing the quality of plant protein-based products.
- Improves plant protein functionality to widen its versatility in different applications.

PlantPro™ 638MDP is a versatile protease preparation designed to efficiently hydrolyse plant-based proteins under low pH conditions. Its optimal activity in the pH range of 2.0 - 4.0 makes it particularly effective for processing plant derived proteins in acidic environments allowing ingredient manufacturers to improve protein solubility and functionality in lower pH formulations. PlantPro™ 638MDP's broad substrate specificity and efficiency in low pH conditions enable the effective hydrolysis of a wide range of different plant-derived proteins to improve the functional properties of the protein improving their suitability for use in different food and beverages that require the protein to be stable and functional at lower pH levels.

Specification

Activity	14,700 Acidic Protease U/g
Biological Source	Microbial and Plant
Form	Off-white to brown powder
Application pH Range	2.0 - 4.0
Application Temperature Range	40 - 55°C
Deactivation Conditions	90°C for 10 minutes

Application & Dose

The optimum dosage of PlantPro™ 638MDP will depend on the protein substrate and level of modification required. A temperature of 40 – 55°C and pH of 2.0 – 4.0 are recommended for optimal hydrolysis. As an initial dosing guide, PlantPro™ 638MDP can be used at a dose of 0.05 – 0.25% w/w protein content. A typical incubation time may be in the range of 4 – 24 hours. It is recommended that optimisation trials are then performed in order to determine the exact conditions to achieve the desired effect. Please contact Biocatalysts Ltd for further technical support. We offer a comprehensive technical application service partnering with you to test our enzymes with your substrates to help you achieve optimal performance, efficiency, and quality in your products.

Health & Safety

Always read the Material Safety Datasheet (MSDS) before use and retain. If you are in any doubt about recommended product handling and safety, please contact Biocatalysts before use. Generally, when using enzymes avoid contact with the skin and eyes and do not breathe dusts or aerosols containing them.

Storage

Powders: Activity will remain within specification for at least 12 months from the date of manufacture when stored below 20°C.

Allergens

Refer to allergen statement.

Food Status

Prepared from enzymes of GRAS status and manufactured to FCC/JECFA/WHO/FAO recommendations for enzymes used in food processing.

GM Status

This product is not derived from a genetically modified organism. This product has been manufactured using a fermentation process of a microbial organism that has not been altered using modern biotechnology. This product does therefore not require labelling as GMO on food labels.

Quality & Food Safety

1. Food Safety Policy - The Company operates a Hazard Analysis at Critical Control Points (HACCP) system. This ensures that ingredients and the production environment are regularly monitored for contamination and that the processes are designed to produce safe products every time.
2. Good Manufacturing Practice (GMP) - The Company's integrated management system encompasses Total Quality, Health and Safety, Food Safety and GMP.
3. Biocatalysts Ltd is certified to ISO9001, ISO14001, ISO18001 and FSSC 22000

Availability

Powders: standard 25kg net poly-lined, 100% recyclable cardboard box.