

Short summary of:

SOLUBILITY, PH AND HEAT STABILITY OF
UNDERSTORY GAMUT

understory

INTRODUCTION

Unveil the power of Gamut by Understory, the marine peptide that's redefining industry benchmarks with its exceptional nutritional composition and versatile functionality. Originating from the ocean's depths, Gamut offers formulators distinctive functional characteristics that empower formulators with the flexibility to design innovative and end consumer friendly products tailored for the contemporary market.

UNDERSTORY GAMUT'S SOLUBILITY, PH AND HEAT STABILITY

Solubility characteristics

Gamut demonstrates exceptional solubility, achieving complete dissolution within one minute of moderate stirring. It maintains transparency in solutions at concentrations exceeding 25% dry matter (DM) at room temperature. With a native pH of 7.4 and an isoelectric point (pI) of 3.9 at 5% w/w concentration in water, it exhibits consistent solubility across a wide pH range, ensuring versatile application in various liquid formulations.

pH stability

Stable across a broad pH spectrum from 2.0 to 9.0, Gamut avoids common issues like gelation and protein precipitation in liquid solutions. This pH stability expands its suitability for innovative product applications, including acidic carbonated beverages, without any quality loss through gelling, flocculation, or precipitation.

Heat stability

Gamut's heat stability is proven by its resistance to Maillard reactions during standard pasteurization at 85°C for 5 minutes and sterilization at 121°C for 20 minutes. This thermal resilience makes it ideal for products requiring extensive thermal and mechanical processing, maintaining its quality and performance without clumping or degradation.

