THE LIQUID FERTILIZER PROCESS

This line performs hydrolyzation using natural enzymes of plant and animal origin. The raw materials enter the reactors mixed with water and enzymes that are capable of modifying the molecular structure of the proteins.

FULLY CONTROLLED ENZYMATIC HYDROLYSIS

GELAMIN
FLUID GELATIN FOR AGRICULTURAL USE

The FCEH® process

FULLY CONTROLLED ENZYMATIC HYDROLYSIS

GELAMIN® is a fluid gelatin for agriculture obtained using a low temperature (55 to 60° C) enzyme hydrolysis process performed in static reactors. The protein chains of collagen, a particularly protein rich material, are attacked by a pool of specific enzymes (stereo selective), and break according to pre-established criteria in a repeatable manner. Once the hydrolysis phase is complete, the product undergoes vacuum concentration to extract the excess water. **GELAMIN**® is therefore a stable, homogenous, standardized product that features predominantly L-Amino acids, which can be easily assimilated by plants as they are compatible with the physiology of various species.

Static reactor

GELAMIN
FLUID GELATIN FOR AGRICULTURAL USE

GELAMIN® is the ideal raw material for formulating fertilizers for fertigation and foliar treatment. The nutrients that it contains are immediately available and capable of performing their action in the ground.
GELAMIN® is defined by its exceptional biostiumulant, complexing, and carrying properties.

RAW MATERIAL PREPARATION

THE RAW MATERIAL IS SIFTED, WASHED, STERILIZED AND SEPARATED BY SIZE.

WASHING - STERILIZATION – STABILIZATION

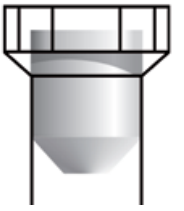
THE HYDROLYSIS TIMES AND THE ENZYMES USED VARY BASED ON THE RAW MATERIAL AND ON THE FINAL APPLICATION OF THE END PRODUCT.

SIZE SELECTION

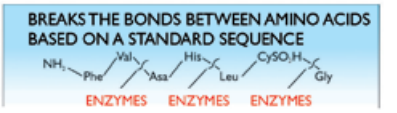
H_2O

SPECIAL STEREO SELECTIVE ENZYMES

REACTOR



TSR (TOP STIRRED REACTOR) TECHNOLOGY



LOW TEMPERATURE PROCESS 60°C

FCEH PROCESS

FILTRATION FOR THE ELIMINATION OF SUSPENDED SOLIDS

FILTER

FOLIAR

SPECIAL STEREO SELECTIVE ENZYMES

LOW TEMPERATURE PROCESS 55°C

CONCENTRATOR

MICRO ELEMENTS Fe Mg Ca B...

LOW TEMPERATURE PROCESS 60°C

REACTOR FOR COMPLEXING WITH MACRO (P, K) AND MICRO ELEMENTS

FILTER

FERTIGATION

CONCENTRATOR

FILTER