

## **AMINOCID® - Garnules** **Protein hydrolysate of vegetative origin**

### **Introducing AMINOCID®- Gr**

AMINOCID® -Gr is a unique BioStimulant comprising of a mixture of amino acids based on bioactive substances derived from Protein hydrolysates of vegetative origin using enzyme hydrolysis method.

Aminocid™ -Gr is formulated using protein hydrolysates derived from soy using an enzymatic process. Acid / Alkali hydrolysis is not used for Aminocid™ extraction and therefore Aminocid™ -Gr is natural and safe source of protein supplementation to plants. Aminocid™ -Gr is not formulated using Amino acids derived from animal origin. The application of protein hydrolysates derived from animal origin sources to plants is against the principle of nature.

The amino acids are building blocks of protein which are abundantly required for crop growth. AMINOCUD® -Gr provides protein to the plant through these essential amino acids that help in improving yield which can be seen as higher grain weight / higher grain production/ better yield of vegetables and fruits. AMINOCUD® -Gr provides macro and micro nutrients required for crops.

AMINOCUD® -Gr is formulated using AMINOCUD® - SL concentrate extracted from vegetative sources by the enzyme hydrolysis method and as such bioactive substances do not get denatured.

AMINOCUD® -Gr is used as an effective soil application product.

### **Mode of Action**

**Protein synthesis:** The amino acids are the structural basis of proteins and are synthesized in the root and leaf system of the plant. The amino acids later travel to the synthesizing centers, which are new leaves & stems. The protein synthesis occurs in the tiny organs of the cell viz. Ribosome.

Roots are able to take free amino acids very effectively. AMINOCUD® - Gr provides ready-made blocks of proteins for protein synthesis, without going through the cycle of amino acids synthesis within the plant. AMINOCID® - Gr provides these essential amino acids to the synthesizing centres through basal nutrition that increase protein availability to the crop and thereby increase crop yield.

### **Method of Application**

Basal dose /Top Dressing: Apply 5- 8 Kg / acre of AMINOCID® -Gr uniformly over the field.

## Crops

AMINOCID<sup>®M</sup>-Gr is suitable for application for on Cereals , Millets , Pulses, Oilseeds, Fibre Crops , Sugar Crops , Forage Crops , Plantation crops ,Vegetables, Fruits, Spices , Flowers , Medicinal crops , Aromatic Crops , Orchards and Ornamentals.

## Compatibility

AMINOCID<sup>®</sup>-Gr is compatible with Pesticides and Fungicides. It is NOT compatible with Copper based products. It should also not be mixed with any chemicals where the reaction is alkaline in nature.

## Shelf Life

AMINOCID<sup>®</sup>-Gr is stable for a period of 36 months from the date of manufacturing.

## Mass Composition

CONSTITUENT	W/W %	FUNCTION
<i>Protein hydrolysate</i>	2.10%	Active
Carrier Double roasted bentonite clay granules	q.s.	Inactive

*Free from Salmonella, Shigella , E.Coli*

## Cautions for handling and use of product

1. Avoid inhalation and skin contact while application of the product.
2. Surplus granules if it had been mixed with chemical fertilizers– should not be disposed in crop lands / stagnant water / flowing water where there is a possibility of causing pollution to natural resources.
3. Do not eat / drink / smoke during application.
4. Direct incidence of AMINOCID<sup>®</sup>-Gr may cause irritation and therefore it is recommended that the operator should use protective gear viz gloves, apron, mask , eye gear and hood.

## Citations

AMINOCID<sup>®</sup>-Gr is a proprietary product and public citations of the same aren't available. However there is plenty of literature available in public domain on Protein hydrolysates of vegetative origin.

## Commitment to Nature

- AMINOCID<sup>®</sup> -Gr is safe to use along with bio fertilizer inoculums like Agri Life Nitrofix<sup>™</sup> (Nitrogen Fixing bacteria) ; P Sol B<sup>®</sup> (Phospho bacteria) ; K Sol B<sup>®</sup> (Potash mobilizing bacteria); Zn Sol B<sup>®</sup> (Zinc mobilizing bacteria) ;S Sol B<sup>®</sup> ( Sulphur solubilizing bacteria ) : Si Sol B<sup>™</sup> ( Silica solubilizing bacteria ) ; Fe Sol B<sup>®</sup> ( Iron / Ferrous solubilizing bacteria ) : Mn Sol B<sup>™</sup> ( Manganese solubilizing microbe ) and Agri Life Agrivam<sup>®</sup> (Vesicular-arbuscular mycorrhiza)
- AMINOCID<sup>®</sup>-Gr can be used as an effective component in INM programmes, thereby leading to a reduction in use of synthetic plant supplements and chemical fertilizers thereby creating a safer environment.
- AMINOCID<sup>®</sup>-Gr does not lead to residue problems and doesn't cause resistance or resurgence problems.

## Benefits from AMINOCID<sup>®</sup>-Gr

- Increases grain / fruit yields because of better protein assimilation
- Promotes enzymatic activities as it contains natural stimulants
- Multiplies soil micro-flora and fauna due to its role as bio-activator
- Stimulates protein creation as it contains amino acids which act as building blocks