

HUMICAL

Humical is formulated with enzymatically hydrolyzed, biologically active free **Amino acids** and a **complex of Metabolites**, combined with humic & fulvic acids and natural chelated CaO.

The natural Amino acids and Metabolites in **Humical** plant maintenance, growth, vitality and reproduction by supplying additional energy through the Krebs cycle and enhancing stress resistance. The humic/fulvic acids in the product add microbiological stimulation and increase the uptake of nutrients as the natural chelated calcium stimulates the formation of solid cell walls.

This results in reduced pest and disease pressure, along with improved yield and quality characteristics."

humical can be applied to all crop types and is especially designed for regions with salinity problems and extreme conditions.

HUMICAL microbial stimulation



Benefits

- **Increases photosynthetic activity and chlorophyll content**
- **Increases nutrient uptake and utilization rate of mineral nutrients**
- **Stronger cell walls and cell stability**
- **Increases plant resistance against salinity stress**
- **Rapid recovery from critical situations**
- **Improves fruit set and quality**

Composition

	(w/w)		(w/w)
Free amino acids	8%	Total amino acids	12%
Organic nitrogen	2%	Total nitrogen	2%
Natural chelated CaO	2%	Humic acid	5%
Biologically Active Metabolites (incl. Bile acids, Lipids, Carbohydrates, Nucleotides Peptides)			>150
Specific weight	1.08kg/liter	pH	4.5-5.5

Application rate

Foliar application: 2-3 l/ha (200-300mL/hL water)

- Apply in the early morning or late evening
- Clean equipment after use.

Drip irrigation: 3-6 l/ha

- Apply the first drip irrigation moments early in the morning so that the pipes are clean during the night.
- Repeat the application every 10-15 days during the growth season

Application time:

It is advisable to use it during periods when the crop needs a physiological stimulus, such as:

- Start of the plant's vegetative cycle, as soon as it has sufficient leaf mass
- Pre-flowering and petal-falling phase
- Fruit development

humical is also recommended when the crop is subjected to adverse conditions (drought, cold, wind, root asphyxia, etc.) and in treatments for plant recovery following critical periods (transplants, damage due to frost, hail, wind, etc.).

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Free Amino Acid Profile

g/kg product

Alanine	6.40
Arginine	2.04
Aspartic acid	6.69
Cystine	0.23
Glutamic acid	7.29
Glycine	4.21
Histidine	2.60
Hydroxyproline	0.20
Isoleucine	3.31
Leucine	7.40
Lysine	7.92
Methionine	2.02
Phenylalanine	3.99
Proline	5.12
Serine	4.55
Taurine	0.50
Threonine	5.12
Thryptophan	1.07
Tyrosine	0.89
Valine	6.01

**above mentioned figures are indicative*

Storage information

Product is stable when stored under normal undiluted conditions. The original product in the state in which it is delivered is hazard-free concerning the transmission of pathogens. Close package properly after the use, store in a frost-free place and avoid storage at direct sunlight! Shake well before use.



Packaging

IBC:	1000 L
BARREL:	220 L
CANNISTER:	5, 10 & 20 L
BOTTLES:	1 L

The product is produced in conformity with EU Directives 837/2007 and 889/2008 and is listed on the FiBL Betriebsmittelliste as approved for organic farming.