



wilchem

ROWLOADER RANGE

LIQUID HUMATE 450

Nutrients (by w/v): Liquid Humate 450 g/L

Wilchem's liquid Humate 450 is an acid and alkaline soluble Humic Acid. It is based on modified potassium humate derived from lignite ore. Humate 450 provides superior solubility over the entire useful pH range and can be mixed with basic and acid liquid fertilisers. Wilchem's liquid humate meets all the requirements of regenerative agriculture to improve plant health and soil function. "Humic Substances aren't the only universal depot of carbon and energy but possess a big biological potential that makes them an analog of ATP for biosphere" Chuko, 2008

KEY BENEFITS

- Can be mixed in fertiliser and ameliorants in both furrow injection and foliar applications
- Compatible with phosphate fertiliser and NPK compounds
- Significant yield improvements have been observed in a range of crops
- Mixes well with Macro Prima to improve soil amelioration in relation to pH and buffering capacity
- Compatible with high salt and acidic fertilisers
- Dissolves quickly and does not precipitate or gel
- Does not plug filters and nozzles

WHERE WILL WILCHEM LIQUID HUMATE WORK?

- Soils with very low organic matter
- Soils with very high or low pH (Buffering capacity)
- Soils with high salt content especially Sodium
- Soils with high PBI or phosphate fixation

OTHER DETAILS

Liquid fertilisers can be corrosive to metals so flush equipment clean after use. Avoid inhaling fumes. Avoid contact with eyes and skin. Wash thoroughly with soap and water after handling. Protect product from frost and do not store for extended periods in direct sunlight.

IMPROVED SOIL FUNCTION

- Improve moisture and aeration regime through improved soil structure
- All humic fractions show resistance to microbial degradation providing long term benefits
- Ability to form water soluble and water insoluble complexes with metal ions and hydrous oxides
- Catalyse organic reactions
- Improve the exchange capacity of soils
- Interaction with clay minerals
- Stimulate microbial growth
- Improve nutrient absorption
- Enhance Phosphorus uptake in soils with high PBI's
- Enhance Potassium release from interlayer positions in some clay minerals
- Humic substances assist with nutrient availability in high pH soils
- Increase abiotic stress tolerance
- Increase root development
- Improve seed germination

COMPATIBILITY

Compatible with a wide range of NPK fertilisers and micro nutrients. Always do a small jar test before preparing a full tank mix.



wilchem

ROWLOADER RANGE

LIQUID HUMATE 450

Nutrients (by w/v): Liquid Humate 450 g/L

MIXING INSTRUCTIONS

Acidic Solutions – Humate 450 can be added directly to acidic solutions such as Wilchem’s Liquid Sulfate Range without dilution. Highly acidic solutions, such as Phosphoric Acid, may require dilution, please discuss with your Wilchem Agronomic Support personnel for mixing instructions.

Alkaline Solutions – Humate 450 should not be added directly to alkaline solutions. Dilution of alkaline products needs to occur before mixing. This includes products such as Wilchem’s Macro Prima, please discuss with your Wilchem Agronomic Support personnel for mixing instructions.

	Application	Rate	Comment
Broad acre Applications	Furrow injection Foliar	0.5 to 6.0 L/Ha 0.5 to 2.0 L/Ha	Inject product at or below the seed Apply with a minimum of 80 L/Ha water
Horticulture	Fertigation	5-20 L/ Ha	Apply from weekly to monthly applications according to crops
Citrus	Fertigation	1.5-3 L/ ha	One application at flower set and one two weeks prior to harvest
Vineyard grapes	Fertigation	1.5-3 L/ Ha	Applications at equal intervals during growing season
Corn	Side dressed or in furrow	1.5-4L/ Ha	One application at seeding , one at Flower set and one prior to harvest
Potatoes	In-furrow or side dressed	1.5-5 L/ Ha	In-furrow or side dressed
Deciduous Fruit and nut trees	Fertigation	1.5-3L/ Ha	One application at flower set and one two weeks prior to harvest
Pasture	Foliar	0.5-3L/ Ha	Apply with a minimum of 80 L/Ha water at break of season and follow up in spring if moisture levels allow

Wilchem takes your crop as seriously as you do!