

## WS NPK 13-3-20+1Mg+5Ca+TE

WS NPK 13 - 3 - 20 + 1Mg + 5Ca + TE with high Calcium and Potassium levels is part of our Water Soluble NPK range with Calcium. WS NPK 13 - 3 - 20 + 1Mg + 5Ca + TE is developed as a 1-tank mix solution, where integrated acids avoid precipitation of Calcium Phosphates in the tank.

WS NPK 13 - 3 - 20 + 1Mg + 5Ca + TE is recommended when high rates of Potassium (K) are required by the crop during critical growth stages. E.g. when fruits or tubers start to grow till the end of the ripening period, before winter dormancy for intensive nutrient charging of perennial crops or during periods when the plant needs extra care due to a-biotic stress like excessive heat or drought. Turf farms and major sporting complexes can use WS NPK 13 - 3 - 20 + 1Mg + 5Ca + TE as it efficiently directs nutrients into the leaf for rapid plant uptake, especially when tie up issues are evident. The high rates of Potassium (K) aids water translocation within the plant, resulting in a higher resiliance to wear and disease resistance.

These water soluble NPKs are rich in nutrient content and based upon the highest quality raw materials: highly soluble, dust-free and with a low sensitivity for caking. The raw materials also have a high, efficient nutrient content and a limited amount of undesired salts. The products are low on Chloride and Sodium. Low biuret urea is used when urea is required. The Water Soluble NPKs are supplemented with high levels of fully chelated trace elements. WS NPK 13 - 3 - 20 + 1Mg + 5Ca + TE can be used in combination with other fertilisers in the Water Soluble NPK product line.

### Product characteristics

- WS NPK with Calcium, developed for 1-tank mix solution
- With integrated acids to avoid precipitation of Calcium Phosphates
- A highly efficient source of Potassium (K)
- To be used during specific critical growth stages
- Highly soluble, pure, free of dust and with limited sensitivity for caking
- Low on sodium and chloride
- Trace elements are fully chelated
- Specially designed for foliar feeding
- Specially designed for fertigation in soil as well as high tech, soilless
- Compatible with most water-soluble fertilisers, except fertilisers containing Calcium. In this case, two tanks are required, or fertilisers should be applied separately

## **Packaging**

Available in packages of 25 kg



#### PRODUCT INFORMATION SHEET

## WS NPK 13-3-20+1Mg+5Ca +TE

## Dosing instructions | Fertigation

Crop	Application date	Dosage in kg / ha
Fruit trees	Possible use from the beginning of fertigation program till 3-4 weeks before harvest	150 - 400 kg
Vineyard	Possible use from the beginning of fertigation	100 - 250 kg
Citrus	During the entire fertigation program	150 - 400 kg
Vegetables (patato, onion, carrot)	After germination, during tuber initiation and bulking	100 - 200 kg
Processing (tomato, cucumber)	Beginning of vegetative growth and possible use till 2-4 weeks before harversting	100 - 300 kg
Banana	During the entire fertigation program	200 - 500 kg

<sup>\*</sup>The number of applications varies between 1 to 3i

### Dosing instructions | Foliar

Crop	Application date	Dosage per application*	Concentration of spray solution (w/v)
Fruit trees	3 - 5 applications, at 14 - 21 days intervals: - Starting after fruit-set.	7 - 12 kg	0.5 - 1.5%
Citrus	2 - 3 applications: - During fruit development	6 - 15 kg	1.0 - 1.5%
Strawberry	During fruit development	5 - 8 kg	1.0 - 1.5%
Banana	4 - 10 applications - From "small" stage till beginning of fruit filling	6 - 15 kg	1.0 - 2.0%
Vegetables (onion, carrot)	3 applications, at 10-15 days intervals: - From 4 weeks after germination,	3 - 8 kg	1.0 - 2.0%
Vegetables (tomato, cucumber)	2 - 4 applications, at 10 days interval: - As of fruit setting	4 - 8 kg	0.5 - 1.0%
Field crops (potato, sugar, beets)	1 - 2 applications: - During vegetative growth - During grain filling	3 - 6 kg	1.0 - 1.5%
Olive	3 - 4 applications: - During spring, before flower induction and during fruit filling	8 - 15 kg	1.0 - 2.0%
Vineyard	From bud opening till 3 - 4 weeks prior to harvest	3 - 6 kg	0.5 - 1.0%
Turf	Use every 2-4 weeks within the growing season or apply when plant tissue results show deficient levels. *BE CAREFUL with tank mixing of this product due to iron and/or sulphates reacting with calcium, make sure the boom sprayer is clean before application.	25 - 35kg per ha	1:10

<sup>\*</sup> Depending on the amount of water used.

In case of foliar feeding as part of a spray-mix, testing the intended spray-mix on a small area is recommended prior to commercial treatment. The mentioned indicated dosages, number of applications, concentration and application stages are subject to soil and climatic conditions, influence of previous crops and other specific conditions. Exact dosages, concentrations and application stages can only be given after an objective diagnostic procedure by e.g. soil, substrate and / or plant analyses.



#### PRODUCT SPECIFICATION SHEET

# WS NPK 13-3-20+1Mg+5Ca +TE

Section 1	Description:		
Product name	WS NPK 13 - 3 - 20 + 1Mg + 5Ca + TE		
Chemical Formula	13 - 3 - 20 + 1Mg + 5Ca + TE		
Appearance	Powder		
Origin	Holland		
Section 2	Chemical composition (typical):		
Total Nitrogen (N)	13.2 %		
Nitric Nitrogen (N-NO <sub>3</sub> )	12.2 %		
Ammoniacal Nitrogen (N-NH <sub>4</sub> )	1.0 %		
Phosphorus(P)	3.2 %		
Potassium (K)	20.3 %		
Magnesium (Mg)	1.3 %		
Calcium (Ca)	5.0 %		
Iron (Fe), EDTA-chelated	0.0560 %		
Manganese (Mn), EDTA-chelated	0.0280 %		
Zinc (Zn), EDTA-chelated	0.0080 %		
Copper (Cu), EDTA-chelated	0.0064 %		
Bore (B)	0.0096 %		
Molybdenum (Mo)	0.0040 %		
Section 3	Physical properties:		
Density (in g/cm <sup>3</sup> ) +/- 10%	1.1 gr/cm <sup>3</sup>		
pH (in 0,1% water solution)	5 - 7		
EC (in 0,1% water solution)	0.8		
Solubility in water (in g/l) +/- 10%	775.2		

