



Water Soluble Fertilizers for Fertigation **Hakaphos[®]** **Basaplant[®]**

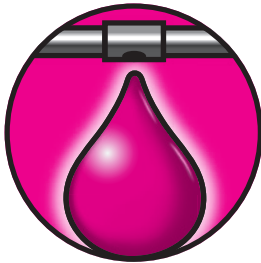
- Fast and complete water solubility
- Homogeneous high quality products
- With chelated micro-nutrients added
- Labour saving ready-to-use products
- Wide product range for optimal crop management



Hakaphos®/Basaplant®

High solubility of product

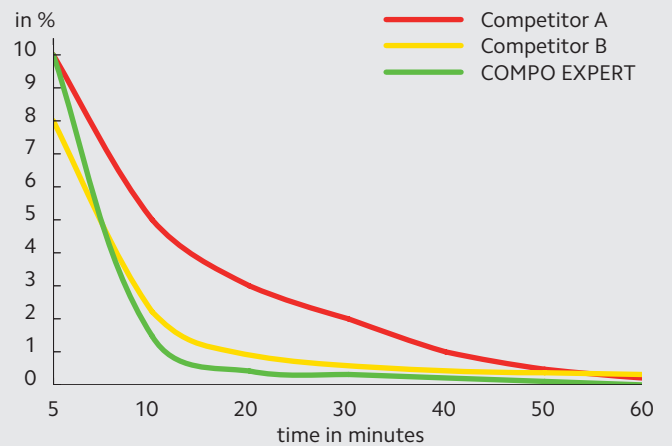
- Industry leading quality and solubility
- Over 99% product dissolution within 10 minutes
- Virtually residue free for efficient and convenient application



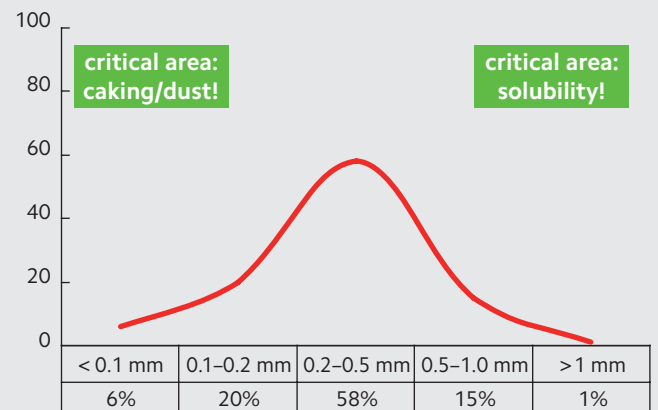
Product quality

- Produced according to ISO 9001
- Free of Chlorine (no use of KCL)
- Metallic micro-nutrients fully EDTA-chelated
- Colour coded for easy identification
- Superior quality due to special grinding technique and high quality raw materials
- Homogeneous particle size
- No product segregation
- Minimal dust and caking risk

Hakaphos®/Basaplant® dissolution curve



Particle distribution in Hakaphos®/Basaplant®



Highest efficiency for crop fertilization

- Use of highest quality raw materials; N,P and K sources are completely water-soluble and therefore fully plant available.
- Nitrogen as Ammonium and Nitrate. The products contain no Urea-N which is inefficient in fertigation systems.
- Fully chelated trace elements ensure superior plant uptake and healthy crop development.
- Efficient supply of fully water soluble Magnesium and Sulphur.
- Wide range of useful formulas for all crops and growth stages.
- Very low salinity.



Safe and single use covering all nutrients

- Ready-to-use NPK formulas do not require blending of single and binary salts.
- Quick and easy dissolving of all formulas.
- Safe application due to easy identification by colour.
- Highest quality, strong 25 kg packaging.

Preparing the solution

- ✓ Prepare a solution by dissolving 15 kg soluble salt per 100 l water (if using water $T > 18\text{ }^{\circ}\text{C}$ use 20–25 kg, if using water $T < 10\text{--}12\text{ }^{\circ}\text{C}$ use 10 kg).
- ✓ Regulate the dosage for the desired final concentration (normally between 0.5–3.0 g per liter).
- ✓ The prepared solution should remain stable for approx. 1 week.
- ✓ It is recommended to run pure water through the system prior to, and for 10–15 minutes following fertigation.

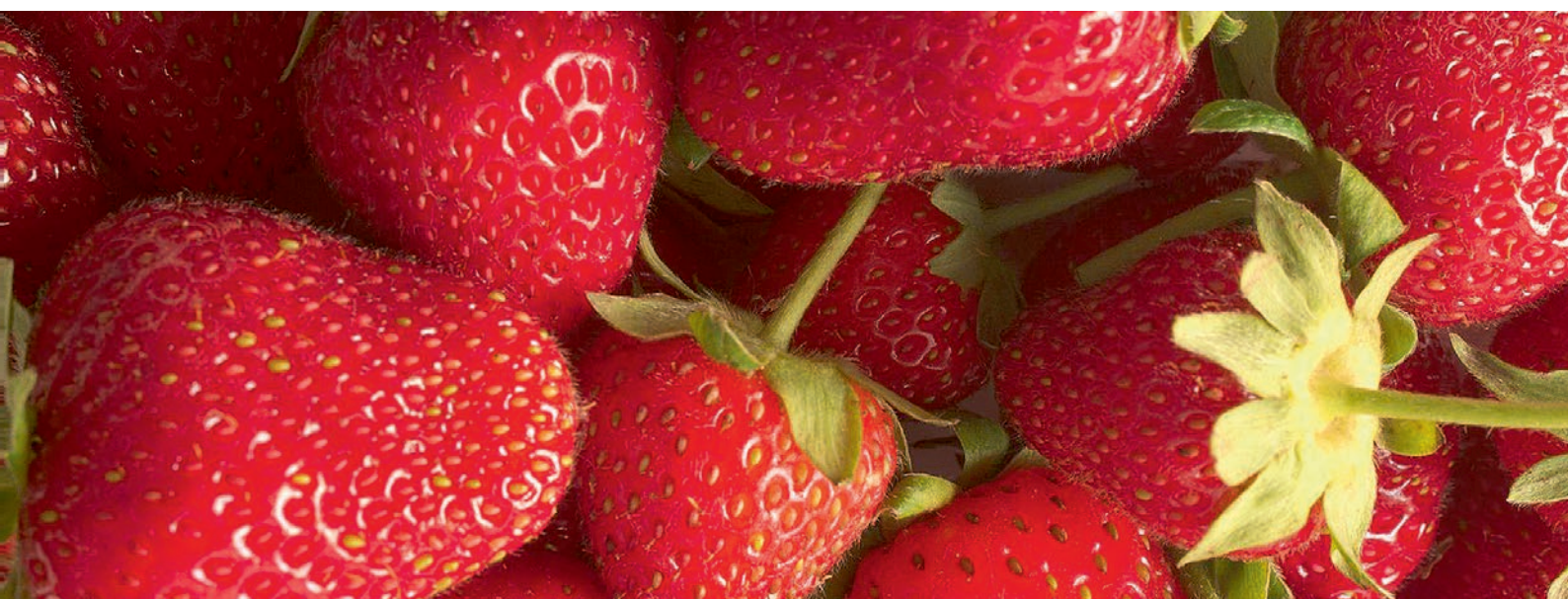


Conductivity at 25 °C (mS/cm)

Product % Concentration	16-8-22	15-10-15	8-12-24	20-5-10	12-32-14	20-5-5	7-12-40	17-5-19	15-5-30	13-40-13
0.5	0.66	0.71	0.73	0.81	0.55	0.85	0.66	0.74	0.68	0.60
1	1.30	1.37	1.35	1.57	1.06	1.65	1.27	1.44	1.33	1.18
1.5	1.91	1.98	1.98	2.29	1.53	2.41	1.86	2.12	1.93	1.70
2	2.47	2.58	2.60	3.00	2.00	3.09	2.39	2.75	2.56	2.23
2.5	3.08	3.16	3.26	3.67	2.46	3.96	2.97	3.36	3.18	2.72
3	3.62	3.82	3.81	4.35	2.91	4.63	3.53	4.02	3.70	3.32
3.5	4.14	4.45	4.38	5.00	3.38	5.23	4.03	4.51	4.34	3.80
4	4.72	5.07	4.91	5.67	3.78	5.91	4.55	5.21	4.91	4.33
4.5	5.22	5.67	5.42	6.27	4.22	6.39	5.06	5.79	5.41	4.86

pH values

Product % Concentration	16-8-22	15-10-15	8-12-24	20-5-10	12-32-14	20-5-5	7-12-40	17-5-19	15-5-30	13-40-13
0.2	5.16	4.98	3.82	5.02	4.73	5.05	3.76	5.14	4.69	3.82
10	4.02	4.16	3.02	4.18	3.94	4.23	2.95	4.31	4.09	3.02
17.5	3.76	4.00	2.95	4.02	3.77	4.07	2.91	4.13	3.92	2.95





Guaranteed nutrient content %

Product	% Nutrient Content												
	Total Nitrogen	Ammonium (NH ₄ -N)	Nitrate (NO ₃ -N)	Phosphate (P ₂ O ₅)	Potassium (K ₂ O)	Sulphur	Magnesium MgO	Boron	Copper	Iron	Manganese	Molybdenum	Zinc
15-10-15	15	11	4	10	15	12	2	0.01	0.02	0.05	0.05	0.001	0.02
8-12-24	8	5.4	2.6	12	24	12	4	0.01	0.01	0.05	0.05	0.001	0.01
20-5-10	20	13	7	5	10	10	2	0.01	0.01	0.05	0.05	0.001	0.01
12-32-14	12	7.4	4.6	32	14	3	3	0.01	0.01	0.05	0.05	0.001	0.01
20-5-5	20	16	4	5	5	16	1.7	0.01	0.01	0.05	0.05	0.001	0.01
7-12-40	7	-	7	12	40	4	2	0.01	0.01	0.05	0.05	0.001	0.01
17-5-19	17	9.8	7.2	5	19	9	1.4	0.01	0.01	0.05	0.05	0.001	0.01
15-5-30	15	4.8	10.2	5	30	4	1.3	0.01	0.01	0.05	0.05	0.001	0.01
13-40-13	13	8.7	4.3	40	13	0	0.11	0.01	0.01	0.05	0.05	0.001	0.01
18-18-18	18	8.1	9.9	18	18	1	0.94	0.01	0.01	0.05	0.05	0.001	0.01
8-12-24	8	5.4	2.6	12	24	12	4	0.01	0.01	0.05	0.05	0.001	0.01

Hakaphos®/ Basaplant®	Composition	Characteristics	Presentation	Use*
	7-12-40 (+2 MgO+4 S+TE)	Soluble NPK fertilizer - High K content for ripening and crop quality - Low chlorine - incl. B, Mo, Cu, Fe, Mn, Zn - EDTA-chelated trace elements	Bag: 25 kg Pallet size: 48 x 25 kg	Concentration depending on specific crop and soil demand.
	13-40-13 (+MgO+TE)	Soluble NPK fertilizer - High P content for vegetation start - Low chlorine - incl. B, Mo, Cu, Fe, Mn, Zn - EDTA-chelated trace elements	Bag: 25 kg Pallet size: 48 x 25 kg	Concentration depending on specific crop and soil demand.
	16-16-16 (+MgO+TE)	Soluble NPK fertilizer - Low chlorine - incl. B, Mo, Cu, Fe, Mn, Zn - EDTA-chelated trace elements	Bag: 25 kg Pallet size: 48 x 25 kg	Concentration depending on specific crop and soil demand.
	14-5-30 (+MgO+TE)	Soluble NPK fertilizer - High N and K content - Low chlorine - incl. B, Mo, Cu, Fe, Mn, Zn - EDTA-chelated trace elements	Bag: 25 kg Pallet size: 48 x 25 kg	Concentration depending on specific crop and soil demand.

* For detailed recommendations please contact your local dealer/agent.

Further products:

Hakaphos®/Basaplant®

20-5-5 (+1,7 MgO+16 S+TE)

18-18-18 (+1 MgO+1 S+TE)

20-5-10 (+2,5 MgO+10 S+TE)

15-5-30 (+1,3 MgO+4 S+TE)

17-5-19 (+1,4 MgO+9 S+TE)

12-32-14 (+3 MgO+3 S+TE)

16-8-22 (+3 MgO+3 S+TE)

15-10-15 (+2 MgO+12 S+TE)

8-12-24 (+4 MgO+12 S+TE)