ElixirZorka

Product Catalogue

ElixirZorka

80 years of experience

"Zorka" mineral fertilizer factory was founded in 1938 and marked the multi-decennial development of Šabac.

After the privatization of this giant, the Elixir Group began the construction of a completely new factory for the production of complex mineral fertilizers with accompanying storage capacity, as well as a revitalization of all liquid raw material storage tanks, at the existing site. The most up-to-date technological solutions have been applied in the design of this factory so that it fully meets domestic and European quality standards as well as the most demanding European environmental norms.

The factory in Šabac, named after the wife of King Peter I Karađorđević (the eldest daughter of the Montenegrin prince, later the king, Nikola Petrović), began its operations on St. Demetrius Day (November 8th), 1938. The event was attended by the Prime Minister of the Kingdom of Yugoslavia, Milan Stojadinović. From the first sulphuric acid plant until the beginning of the breakup of the SFRY, Zorka was the synonym of the industrial development of Šabac.

Elixir Zorka's production includes various formulations of the highest quality complex mineral fertilizers, characterized by a high concentration of nutritive elements, uniform granulation and high water solubility in soil. These mineral fertilizers completely satisfy nutrient requirements of different crops, regardless of crop specificity, related production requirements and differences in soil quality.

Elixir Zorka also offers the possibility to design and produce unique new formulations that meet client's specific needs. These formulations secure maximum yields.

Elixir Zorka's complex mineral fertilizers are produced by a chemical reaction, which develops between liquid components in a tubular reactor, reinforced with highly soluble substances easily adapted to all plant crops and soil types. The chemical granulation process has a number of advantages over other available technologies for the production of mineral fertilizers, such as:

- ✓ **Possibility of obtaining a wide variety of NP, PK and NPK formulations**
- ✓ **High and uniform quality of granules in the final product**

Standards

Production processes at Elixir Zorka's mineral fertilizer plant in Šabac have been harmonized with domestic and European regulations for the production and trade of mineral fertilizers in the Republic of Serbia, EU Member States and other countries that have aligned their regulations with the EU, which, among others, refers to the following requirements:

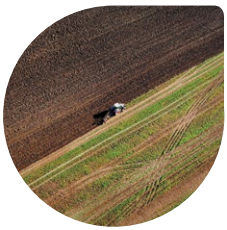
- ✓ **REACH Regulation EU 2007**
- ✓ **EC FERTILIZER – EU Regulation (EC) No 2003/2003**
- ✓ **Law on Plant Nutrition Products and Soil Improvers, Republic of Serbia**

Elixir Zorka has implemented the standards ISO 9001: 2008, ISO 14001: 2004, OHSAS 18001: 2007, and SA 8000: 2014. Certification procedures have been completed for ISO 9001, ISO 14001 and OHAS 18001.

Product portfolio
Mineral fertilizers - Elixir Zorka

ELIXIR BASIC

The complex mineral fertilizers from the BASIC line feature a high concentration of nutrients, characterized by the presence of all macroelements and uniform granulation. Each granule has the same chemical composition, and due to the form of the active substance, it is characterized by good water solubility.



ELIXIR PREMIUM

The ELIXIR PREMIUM product line includes formulations the content of which is specially enriched with secondary and microelements in order to provide plants with all nutrients necessary for faster growth and better yield.

ELIXIR SUPREME

The Elixir SUPREME product line includes complex mineral fertilizers enriched with microelements and produced from the best raw materials, with potassium (K) in sulphate form (SOP). The production line is being developed so as to enrich the formulations with useful bacteria, carefully chosen microelements and slow-release effects.

ELIXIR MICRO GRAN

Microgranular fertilizers are produced with innovative technology designed specifically for the production of granules 0.5-1.2 mm in size. Elixir Zorka microgranulated starting fertilizers have a well-balanced ratio of nutrients, primary, secondary and essential microelements, which stimulate plant growth in the initial stages of development and contribute to a better rooting of the plant.

Elixir BASIC

The complex mineral fertilizers from the BASIC line features a high concentration of nutrients, characterized by the presence of all macroelements and uniform granulation. Each granule has the same chemical composition, and due to the form of the active substance, it is characterized by good water solubility. These mineral fertilizers fully meet all crops needs for elements, regardless of the specificity of crops, or differences in soil quality.

By applying the formulations from the Basic line, we enable crops a fast, uniform growth, and greater physical stability. Such plants are much more tolerant to adverse climatic influences and provide safety in production.

NPK 6:12:24
NPK 6:24:12
NPK 7:21:21
NPK 8:15:15
NPK 15:15:15
NPK 16:16:16
NPK 7:20:30
NP 10:20
NP 16:20
PK 20:30

NPK 6:12:24

NPK 6:12:24 + 6% S is an inorganic, solid, complex mineral fertilizer that contains all necessary macroelements – nitrogen (N), phosphorus (P), potassium (K) and secondary element sulphur (S). Specified nitrogen (N) content is in the ammonium form, which is the most efficient form of nitrogen (N) with respect to the needs of arable crops.
The application of this fertilizer ensures that cultivated crops have quick, even growth and better physical stability of the crop.

Total NITROGEN (N)	6.00%
Ammoniacal nitrogen	6.00%
Total PHOSPHORUS PENTOXIDE (P_2O_5)	12.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	10.00%
Phosphorus pentoxide (P_2O_5) soluble in water	7.20%
POTASSIUM OXIDE (K_2O) soluble in water	24.00%
Sulphur (S) soluble in water	6.00%

Key reasons for application

- ✓ Excellent solution for crops with increased potassium (K) requirements
- ✓ High efficiency of use of ammonium form of nitrogen (N)
- ✓ Contains well-soluble phosphorus (P)
- ✓ Stimulates physical stability of arable crops
- ✓ Economically acceptable formulation

Application recommendations	kg/ha
Sugar beet	500-700
Rapeseed	250-400
Fruits	350-800
Vegetables	400-900
Sunflower	250-350
Wheat	300-400
Corn	300-450
Soya	250-400

NPK 6:24:12

NPK 6:24:12 + 2% Ca + 5% S + 0.05% Zn
is an inorganic, solid, complex mineral fertilizer that contains all necessary macroelements – nitrogen (N), phosphorus (P), potassium (K), secondary elements calcium (Ca) and sulphur (S), as well as zinc (Zn), one of the most important microelements for plant growth.

Total NITROGEN (N)	6.00%
Ammoniacal nitrogen	6.00%
Total PHOSPHORUS PENTOXIDE (P_2O_5)	24.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	19.20%
Phosphorus pentoxide (P_2O_5) soluble in water	14.40%
POTASSIUM OXIDE (K_2O) soluble in water	12.00%
Calcium (Ca) soluble in water	2.00%
Sulphur (S) soluble in water	5.00%
Zinc (Zn) total	0.05%

Key reasons for application

- ✓ Excellent solution for crops with increased phosphorus (P) requirements
- ✓ High efficiency of use of ammonium form of nitrogen (N)
- ✓ Contains well-soluble phosphorus (P)
- ✓ Presence of secondary macroelements (Ca and S) affects nitrogen (N) intake, numerous enzyme processes, and protein synthesis as well as plant tolerance to stress conditions
- ✓ Presence of zinc (Zn) enhances the plant hormone (auxin), chlorophyll and carbohydrates synthesis.
- ✓ Enhanced plant growth in the initial stages of development
- ✓ Economically acceptable formulation

Application recommendations	kg/ha
Wheat	300-400
Barley	250-400
Corn	300-450
Soya	250-400
Sunflower	200-400
Rapeseed	250-450
Fruits	300-650
Vegetables	300-700
Pastures	300-500

NPK 7:21:21

NPK 7:21:21 + 4% S + 0.05% Zn is an inorganic, solid, complex fertilizer from Elixir Basic product line. It contains all necessary macroelements – nitrogen (N), phosphorus (P) and potassium (K). Along with primary macroelements, it contains a secondary element sulphur (S) and microelement zinc (Zn). Presence of sulphur (S) affects protein synthesis stimulates plant enzyme activities, but it is also vital in the nitrogen (N) metabolism of plants. The presence of zinc (Zn) enhances the plant hormone (auxin), chlorophyll and carbohydrates synthesis.

Total NITROGEN (N)	7.00%
Ammoniacal nitrogen	7.00%
Total PHOSPHORUS PENTOXIDE (P_2O_5)	21.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	19.00%
Phosphorus pentoxide (P_2O_5) soluble in water	14.70%
POTASSIUM OXIDE (K_2O) soluble in water	21.00%
Sulphur (S) soluble in water	4.00%
Zinc (Zn) total	0.05%

Key reasons for application

- An excellent solution for cultures that have an emphasized need for phosphorus (P) and potassium (K)
- High efficiency in the application of ammonium forms of nitrogen (N)
- Better utilization of phosphorus (P) and potassium (K) in the year of application
- Significant influence on the formation of qualitative and quantitative characteristics of the fruit
- Provides continuous and targeted supply of plant with easily accessible nutrients

Application recommendations	kg/ha
Sugar beet	400-700
Rapeseed	200-400
Fruits	350-600
Vegetables	400-800
Sunflower	200-400
Wheat	200-400
Corn	200-500
Soya	200-300

NPK 16:16:16

NPK 16:16:16 + 10% S is a highly water-soluble complex mineral fertilizer from Elixir Zorka. It is characterized by its highly water-soluble phosphorus (P), which makes more than 90%. The high water solubility of phosphorus (P) is accompanied by high water solubility and availability of other elements in the formulation. Thanks to these characteristics, cultivated crops are already in the first year able to fully use the nutrients.

Total NITROGEN (N)	16.00%
Ammoniacal nitrogen	14.70%
Amide nitrogen	1.30%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	16.00%
Phosphorus pentoxide (P_2O_5) soluble in water	14.40%
POTASSIUM OXIDE (K_2O) soluble in water	16.00%
Sulphur (S) soluble in water	10.00%

Key reasons for application

- ✓ The water solubility of phosphorus (P) is over 90%
- ✓ Speed of operation and availability of nutrients
- ✓ The presence of sulphur (S) affects protein synthesis, stimulates plant enzyme activities, but it is also vital in nitrogen (N) metabolism of plants
- ✓ Balanced nutrition for all plant species
- ✓ Maximum utilization of phosphorus (P) and other nutrients during vegetation period

Application recommendations	kg/ha
Wheat	250-400
Corn	250-400
Sunflower	200-400
Soya	200-400
Sugar beet	350-700
Barley	250-400
Fruits	300-600
Vegetables	350-800

NPK 15:15:15

NPK 15:15:15 + 11% S is an inorganic, solid, complex mineral fertilizer that contains all necessary macroelements – nitrogen (N), phosphorus (P), potassium (K) and secondary element sulphur (S). Sulphur (S) participates in numerous physiological processes in plants: participates in enzyme, protein, vitamin and aromatic materials structure. It is applied to a large number of crop cultures due to its specific formulation and balanced ratio of nutrients. It is recommended for soils that contain an equal amount of phosphorus (P) and potassium (K). This fertilizer can be applied in autumn, prior to primary cultivation or in the spring prior to or along with the sowing.

Total NITROGEN (N)	15.00%
Ammoniacal nitrogen	14.00%
Amide nitrogen	1.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	15.00%
Phosphorus pentoxide (P_2O_5) soluble in water	13.50%
POTASSIUM OXIDE (K_2O) soluble in water	15.00%
Sulphur (S) soluble in water	11.00%

Key reasons for application

- ✓ Each granule is characterized by a balanced ratio of nutritive elements
- ✓ It ensures uniform growth of plants in the first stages of development
- ✓ Better phosphorus (P) utilization during vegetation period
- ✓ Contains secondary sulphur (S)
- ✓ It speeds up the process of organic matter mineralization
- ✓ It ensures the unique quality of the product

Application recommendations	kg/ha
Wheat	250-450
Corn	250-450
Sunflower	200-400
Soya	200-400
Barley	250-400
Sugar beet	400-700
Vegetables	400-800
Fruits	300-600

NPK 8:15:15

NPK 8:15:15 + 3% Ca + 9% S is a complex mineral fertilizer that contains all the necessary macroelements – nitrogen (N), phosphorus (P), potassium (K). It is enriched with calcium (Ca) and sulphur (S), as important secondary nutrients. The presence of secondary macroelements (Ca and S) affects nitrogen (N) intake, numerous enzyme processes, and protein synthesis as well as plant tolerance to stress conditions.
It can be applied to a large number of crop cultures due to its specific formulation and balanced ratio of nutrients. It is recommended for soils that contain an equal amount of with phosphorus (P) and potassium (K). It is characterized by high solubility and availability of phosphorus (P) in the year of application.

Total NITROGEN (N)	8.00%
Ammoniacal nitrogen	8.00%
Total PHOSPHORUS PENTOXIDE (P_2O_5)	15.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	12.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in water	9.00%
POTASSIUM OXIDE (K_2O) soluble in water	15.00%
Calcium (Ca) soluble in water	3.00%
Sulphur (S) soluble in water	9.00%

Key reasons for application

- ✓ Each granule is characterized by a balanced ratio of nutritive elements
- ✓ High efficiency of use of ammonium form of nitrogen (N)
- ✓ Contains well-soluble phosphorus (P)
- ✓ Presence of secondary macroelements calcium (Ca) ans sulphur (S)
- ✓ Speeds up the process of organic matter mineralization
- ✓ Economically acceptable formulation

Application recommendations	kg/ha
Wheat	250-450
Corn	250-450
Sunflower	200-400
Soya	200-400
Rapeseed	250-400
Barley	250-400
Fruits	300-600
Pastures	300-500

NP 10:20

NP 10:20 + 2% Ca + 11% S is an inorganic, solid, complex mineral fertilizer which contains primary macroelements – nitrogen (N) and phosphorus (P). It is enriched with secondary elements sulphur (S) and calcium (Ca).
The fertilizer **NP 10:20 + 2% Ca + 11% S** can be applied to a large number of crops, and it is especially recommended for nutrition of winter crops. Due to high water-solubility of nitrogen (N) and phosphorus (P), it can be used as a starting fertilizer.

Total NITROGEN (N)	10.00%
Ammoniacal nitrogen	10.00%
Total PHOSPHORUS PENTOXIDE (P_2O_5)	20.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	18.00%
Phosphorus pentoxide (P_2O_5) soluble in water	12.00%
Calcium (Ca) soluble in water	2.00%
Sulphur (S) soluble in water	11.00%

Key reasons for application

- ✓ Maximum availability of nutritive elements necessary for crop growth and development
- ✓ Ideal ratio of nitrogen (N) and phosphoric (P) component for starting application
- ✓ Significantly higher utilization of phosphorus (P) during vegetation period
- ✓ Speeds up the process of organic matter mineralization
- ✓ Ensures higher adaptability of crop to unfavorable weather conditions

Application recommendations	kg/ha
Wheat	250-450
Barley	250-400
Rye	250-400
Corn	250-500
Sunflower	250-400
Pastures	300-500

NP 16:20

NP 16:20 + 12% S + 0.05% B is an inorganic, solid, complex mineral fertilizer that contains nitrogen (N) and phosphorus (P), as well as secondary element sulphur (S), and boron (B) which is important for blooming.
Sulphur (S) is a necessary macroelement that is the constituent part of amino acids, enzymes and coenzymes, vitamins, chlorophyll and which ensures normal growth and development of arable crops.

Total NITROGEN (N)	16.00%
Ammoniacal nitrogen	16.00%
Total PHOSPHORUS PENTOXIDE (P_2O_5)	20.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	17.50%
Phosphorus pentoxide (P_2O_5) soluble in water	13.50%
Sulphur (S) soluble in water	12.00%
Boron (B) soluble in water	0.05%

Key reasons for application

- ✓ Maximum availability of nutritive elements necessary for crop growth and development
- ✓ Ideal ratio of nitrogen (N) and phosphoric (P) component for starting application
- ✓ Significantly higher utilization of phosphorus (P) during vegetation period
- ✓ Speeds up the process of organic matter mineralization
- ✓ Ensures higher adaptability of crop to unfavourable weather conditions

Application recommendations	kg/ha
Wheat	250-400
Barley	250-400
Rye	250-400
Corn	250-500
Sunflower	250-400
Pastures	300-500

PK 20:30

PK 20:30 + 6% Ca is an inorganic, solid, complex mineral fertilizer with increased content of phosphorus (P) and potassium (K), enriched with the presence of calcium (Ca).
It is suitable for the nutrition of crops with an increased need for phosphorus (P) and potassium (K).
Phosphoric (P) component is over 90% water-soluble and it is readily available to plants. High water-solubility and quick release of nutritive elements ensures the possibility of application of this type of fertilizers not only in the summer, but also immediately prior to sowing or with the sowing.

PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	20.00%
Phosphorus pentoxide (P_2O_5) soluble in water	18.00%
POTASSIUM OXIDE (K_2O) soluble in water	30.00%
Calcium (Ca) soluble in water	6.00%

Key reasons for application

- ✓ Excellent solution for crops with increased phosphorus (P) and potassium (K) requirements
- ✓ Higher utilization of phosphorus (P) and potassium (K) during vegetation period
- ✓ Increased share of calcium (Ca) achieves an important impact on qualitative and quantitative features of the fruit
- ✓ Ensures continuous and aimed provision of plants with highly available nutrients
- ✓ Possibility of simultaneous application with sowing

Application recommendations	kg/ha
Sugar beet	400-600
Sunflower	200-300
Wheat	200-350
Corn	200-400
Soya	150-300
Rapeseed	200-400
Fruits	300-600
Vegetables	350-700

NPK 7:20:30

NPK 7:20:30 + 3% S is an inorganic, solid, complex mineral fertilizer which contains all necessary macroelements – nitrogen (N), phosphorus (P) and potassium (K).
It is designated to nutrition grown on various soil types, especially when there is an increased need for potassium (K). It is applied in the basic or pre-seeding cultivation of land, by even distribution on the entire area or locally in rows. It is very important that arable plants are timely provided with nutritive elements which are also highly readily available and evenly distributed in soil.

Total NITROGEN (N)	7.00%
Ammoniacal nitrogen	7.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	20.00%
Phosphorus pentoxide (P_2O_5) soluble in water	18.00%
POTASSIUM OXIDE (K_2O) soluble in water	30.00%
Sulphur (S) soluble in water	3.00%

Key reasons for application

- ✓ Contains all necessary macroelements for successful production
- ✓ Excellent solution for crops with increased phosphorus (P) and potassium (K) requirements
- ✓ Higher utilization of phosphorus (P) and potassium (K) in the year of application
- ✓ Significantly impacts the formation of qualitative and quantitative features of the fruit
- ✓ Ensures continuous and aimed provision of plants with highly available nutrients

Application recommendations	kg/ha
Fruits	350-700
Vegetables	400-700
Sugar beet	400-600
Rapeseed	200-400
Corn	200-500
Sunflower	200-400
Wheat	200-400
Soya	150-300

Elixir PREMIUM

The ELIXIR PREMIUM line includes formulations the content of which is specially enriched with secondary and microelements in order to provide plants with all nutrients necessary for faster growth and better yield.

Precise microelement dosing systems secure that the content of microelements, in each granule, is uniform. Microelements are in sulphate form, highly water-soluble, making them readily available to plants. Microelements complement the impact on plant growth and development provided by primary and secondary elements. These include boron (B), manganese (Mn), copper (Cu), molybdenum (Mo), iron (Fe), and zinc (Zn).

AmoSulfan
NutriMAP
NutriVeg

AMOSULFAN

AmoSulfan is nitrogen (N) fertilizer that is exceptionally suitable for nutrition of all crop cultures.
Ammonium ion is not movable in soil because it binds in the interlayer gaps of clay minerals. The fixation of ammonium ion is a useful process since it prevents nitrogen (N) losses by evaporation, leaching and denitrification, thus ensuring balance of nitrogen (N) in soil. From the aspect of the plant itself, fixation is also, a positive process since ammonium ion which is released gradually behaves as a slow-acting source of nitrogen (N) for plants. Sulphur (S) in this fertilizer affects better utilization of nitrogen (N)and its increase in the plants.
The application of **AmoSulfan** significantly improves the availability and uptake of phosphorus (P) that is blocked in the soil.

AmoSulfan

Ammoniacal nitrogen	20.00%
Sulphur (S) soluble in water	24.00%

Key reasons for application

- ✓ Recommended for all crop cultures, especially for those rich in carbohydrates (corn, barley)
- ✓ Suitable for plants which have a increased need for sulphur (S), such as: rapeseed, cabbage, onion and garlic, leguminosae (peas, string beans, lucerne, clover), sugar beet, potato, tomato and tobacco

Application recommendations	kg/ha
Wheat	200-400
Fruits	250-550
Vegetables	250-600
Rapeseed	250-500
Corn	300-600
Sugar beet	250-350
Sunflower	250-350
Soya	150-300

NutriMAP

NutriMAP NP 10:40 + 2% Ca + 4% S + 0.1 % Zn is a mineral fertilizer produced with the aim to offer a complete solution for the nutrition of the largest number of cultivated crops to the agricultural producers. It is characterized by a balanced ratio of the most important nutritive elements: nitrogen (N), phosphorus (P), calcium (Ca), sulphur (S) and zinc (Zn). Homogeneous chemical and uniform granulometric composition of this formulation ensures even distribution of nutritive elements in soil, whereby nutrition efficiency of cultivated crops is increased.
Application of **NutriMAP** provides the plants with all the necessary nutritive elements in the optimal ratio, according to the biological needs of the plants.

NutriMAP NP 10:40

Total NITROGEN (N)	10.00%
Ammoniacal nitrogen	10.00%
Total PHOSPHORUS PENTOXIDE (P_2O_5)	40.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	36.00%
Phosphorus pentoxide (P_2O_5) soluble in water	32.00%
Calcium (Ca) soluble in water	2.00%
Sulphur (S) soluble in water	4.00%
Total Zinc (Zn)	0.10%

Key reasons for application

- ✓ Technologically improved formulation for balanced nutrition of most crops
- ✓ Contains more efficient nitrogen (N) which is readily available to the root system
- ✓ Contributes to a significant increase in phosphorus (P) efficiency in the vegetation period
- ✓ Excellent solution for crops with increased phosphorus (P) requirements
- ✓ Has favourable effects on protein synthesis and product quality
- ✓ Ensures even growth and physical stability of crops
- ✓ Stimulates synthesis of auxins, natural growth hormones
- ✓ Increases crop tolerance to the most significant fungal diseases
- ✓ Maximum yields, increased profitability

Application recommendations	kg/ha
Wheat	150-250
Corn	200-300
Barley	150-250
Rye	150-200
Sunflower	150-250
Rapeseed	150-200
Fruits	200-300
Vegetables	200-300
Sugar beet	200-400

NutriVeg

NutriVeg NPK 10:10:20 + 2% MgO + 9% S + 0.2% B + 0.1% Zn is an inorganic, solid, complex mineral fertilizer. Its application ensures that arable crops are fully nurtured with all necessary macro and microelements in the course of the production cycle. Potassium (K) stimulates metabolic processes, accumulation of carbohydrates and contributes to a more efficient water regime. The latest researches have proved that potassium (K) plays an important role in the processes of increasing the tolerance to low temperatures.

NutriVeg NPK 10:10:20

Total NITROGEN (N)	10.00%
Ammoniacal nitrogen	10.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and water	10.00%
Phosphorus pentoxide (P_2O_5) soluble in water	7.00%
POTASSIUM OXIDE (K_2O) soluble in water	20.00%
MAGNESIUM-OXIDE (MgO) total	2.00%
Sulphur (S) soluble in water	9.00%
Total Boron (B)	0.20%
Total Zinc (Zn)	0.10%

Key reasons for application

- ✓ Contains all macro and microelements necessary for successful production
- ✓ High efficiency of use of ammonium form of nitrogen (N)
- ✓ Maximum utilization of (P) component during vegetation period
- ✓ Positively affects the process of photosynthesis and chlorophyll creation
- ✓ Increases crop tolerance to the most significant fungal diseases
- ✓ Stimulates crop fertilization process and more regular fruit formation
- ✓ Significantly affects the formation of qualitative and quantitative features of the fruit
- ✓ Ensures continuous and aimed provision of plants with highly available nutrients

Application recommendations	kg/ha
Potato	800-1,100
Peper	600-900
Tomato	600-900
Carrot	500-800
Cabbage	600-900
Onion	500-800
Fruits	400-900
Sugar beet	500-800

Elixir SUPREME

In order to offer different markets the best formulations for their specific soil and crops, Elixir Zorka's development team has created the SUPREME product line. The Elixir SUPREME line includes complex mineral fertilizers enriched with microelements and produced from the best raw materials, with potassium in sulphate form (SOP). Every granule contains the same high quality content and ratio of nutrients, which are high-soluble and immediately ready for plant intake.

NPK 12:11:18
NPK 12:12:17
NPK 15:15:15
PK 15:30
NPK 16:27:7

NPK 12:11:18

+ 2% MgO + 15% S + 0.01% B + 0.02% Zn + TE

Elixir Supreme 12:11:18 product is a complex inorganic solid mineral fertilizer. It contains basic nutrients: nitrogen (N), phosphorus (P) and potassium (K) with the addition of sulphur (S) and magnesium (Mg) and microelements such as zinc (Zn), boron (B), manganese (Mn) and iron (Fe).

TOTAL NITROGEN (N)	12.00%
Ammoniacal nitrogen ($N\text{-}NH_4$)	12.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and in water	11.00%
Phosphorus pentoxide (P_2O_5) soluble in water	8.50%
POTASSIUM OXIDE (K_2O) soluble in water	18.00%
MAGNESIUM OXIDE (MgO) total	2.00%
SULPHUR (S) soluble in water	15.00%
BORON (B) total	0.01%
ZINC (Zn) total	0.02%
Trace elements Fe, Mn	
Potassium source:	SOP

Key reasons for application:

- ✓ High accessibility of nutrients
- ✓ More efficient nitrogen (N) in ammonium form
- ✓ High water-solubility and absorption of phosphorus (P) in the period of vegetation
- ✓ Potassium (K) is in the sulphate form (SOP), which makes an excellent solution for plant varieties that are sensitive to chlorine (Cl)
- ✓ Presence of sulphur (S) affects protein synthesis, stimulates plant enzyme activities, but it is also vital in nitrogen (N) metabolism of plants
- ✓ Magnesium (Mg) has the key role in chlorophyll, protein, and pectin synthesis, and it affects the phosphorus (P) intake and mobility in the plant

Application recommendations	kg/ha
Vegetables	450-1,150
Tomato	500-900
Potato	700-1,100
Fruits	400-1,000
Vineyards	400-700
Raspberries	500-1,000
Avocado	500-1,000
Bananas	400-1,200

NPK 12:12:17

+ 2% MgO + 14% S + 0.02% B + 0.01% Zn

Elixir Supreme NPK 12:12:17 product is a complex inorganic solid mineral fertilizer with a specific nutrient ratio that enables balanced nutrition for a large number of plant varieties on all soil types.

TOTAL NITROGEN (N)	12.00%
Ammoniacal nitrogen ($N\text{-}NH_4$)	12.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and in water	12.00%
Phosphorus pentoxide (P_2O_5) soluble in water	10.50%
POTASSIUM OXIDE (K_2O) soluble in water	17.00%
MAGNESIUM OXIDE (MgO) total	2.00%
SULPHUR (S) soluble in water	14.00%
BORON (B) total	0.02%
ZINC (Zn) total	0.01%
Potassium source:	SOP

Key reasons for application:

- ✓ Nitrogen (N) in its ammonium form is absorbed directly by plants and it is more difficult to leach from soil
- ✓ Phosphorus component (P) of high water-solubility in a form suitable for absorption
- ✓ Potassium (K) on a sulphate basis, which makes the product an excellent solution for application in crops sensitive to chlorine (Cl)
- ✓ Suitable formulation for plant varieties with an emphasized need for potassium (K)
- ✓ Presence of sulphur (S) affects protein synthesis, increase of product quality and more efficient nitrogen (N) intake
- ✓ Presence of zinc (Zn) enhances the plant hormone (auxin), chlorophyll and carbohydrates synthesis

Application recommendations	kg/ha
Vegetables	500-1,200
Onion	500-750
Carrots	450-750
Cabbage	700-1,000
Fruits	400-1,000
Strawberries	500-1,000
Blueberries	450-750
Oranges	400-900

NPK 15:15:15

+ 12 % S

The product NPK 15:15:15 represents a complex inorganic solid mineral fertilizer, which with a specific ratio of nutrients provides balanced nutrition for a large number of plant varieties on all soil types.

TOTAL NITROGEN (N)	15.00%
Ammoniacal nitrogen	13.50%
Nitrate nitrogen	1.50%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and in water	15.00%
Phosphorus pentoxide (P_2O_5) soluble in water	14.00%
POTASSIUM OXIDE (K_2O) soluble in water	15.00%
Sulphur (S) soluble in water	12.00%
Potassium source:	SOP

Key reasons for application:

- ✓ Each granule contains exactly the same nutrients ratio
- ✓ Plants directly assimilate nitrogen (N) in ammonia form which is more difficult to be leached from soil
- ✓ Phosphorus component (P) of a high water-solutbility in a suitable form for bio-assimilation
- ✓ Potassium (K) on the sulphate basis (SOP), which makes the product an excellent solution for application on crops sensitive to chlorine (Cl)
- ✓ The presence of sulphur (S) affects the protein synthesis, and stimulates plant enzyme activities

Application recommendations	kg/ha
Vegetables	400-1,100
Tomato	500-1,100
Cabbage	600-1,000
Potato	800-1,100
Fruits	400-800
Vineyards	400-700
Citruses	600-1,000

PK 15:30

+ 11% S

Elixir Supreme PK 15:30 + 11% S is a complex mineral fertilizer that provides cultivated plants with nutrition, in particular the varieties demanding high quantities of phosphorus (P) and potassium (K). The presence of sulphur (S) directly affects the achieving of better and higher yields while increasing the tolerance of plants to stressful environmental conditions.

PHOSPHORUS PENTOXIDE (P_2O_5) total	15.00%
Phosphorus(V)oxide (P_2O_5) soluble in NAC and in water	12.00%
Phosphorus(V)oxide (P_2O_5) soluble in water	11.00%
POTASSIUM OXIDE (K_2O) soluble in water	30.00%
SULPHUR (S) soluble in water	11.00%
Potassium source:	SOP

Key reasons for application:

- ✓ Each granule contains exactly the same ratio of nutrients
- ✓ Phosphorous (P) is of good water solubility and is in a suitable form for adoption
- ✓ Sulphate-based potassium (K) makes the product excellent for use in chlorine (Cl) sensitive crops
- ✓ Potassium (K) in formulation contributes to better plant tolerance to stress conditions, more efficient regulation of water balance and carbohydrate turnover
- ✓ The presence of sulphur (S) affects protein synthesis, stimulates the enzymatic activity of plants, but is also crucial in nitrogen (N) metabolism in plants
- ✓ Significantly affects the formation of qualitative and quantitative features of the fruit
- ✓ Ensures continuous and aimed provision of highly available nutrients to plants

Application recommendations	kg/ha
Vegetables	400-800
Onion	400-700
Fruits	350-600
Sour cherry	400-600
Grapevine	350-600
Tobacco	300-500
Blueberries	450-750
Oranges	400-900

NPK 16:27:7

+ 9 % S + 0.1 % B + 0.1 % Zn

Elixir Supreme NPK 16:27:7 product is a complex inorganic solid mineral fertilizer. It contains basic nutrients - nitrogen (N), phosphorus (P) and potassium (K) with the addition of sulphur (S) and microelements of zinc (Zn), and boron (B).

TOTAL NITROGEN (N)	16.00%
Ammoniacal nitrogen ($N\text{-}NH_4$)	16.00%
PHOSPHORUS PENTOXIDE (P_2O_5) soluble in NAC and in water	27.00%
Phosphorus pentoxide (P_2O_5) soluble in water	25.70%
POTASSIUM OXIDE (K_2O) soluble in water	7.00%
SULPHUR (S) soluble in water	9.00%
BORON (B) soluble in water	0.10%
ZINC (Zn) total	0.10%
Potassium source:	Low chlorine levels

Key reasons for application:

- ✓ It contains all macro and microelements necessary for successful production
- ✓ More efficient nitrogen (N) in ammonium form
- ✓ Emphasised phosphorus (P) component of the maximum water solubility
- ✓ It is designated to soils with medium and high potassium (K) content
- ✓ Presence of sulphur (S) contributes to increase of product quality and more efficient nitrogen (N) absorption
- ✓ Microelements affect numerous physiological processes in plants: increasing the activity of certain enzymes, hormone and chlorophyll synthesis, as well as enhancing of plant flowering and insemination
- ✓ The formulation is perfectly balanced for use in small grains and corn

Application recommendations	kg/ha
Small grains	200-400
Corn	250-400
Soya	200-400
Sunflower	250-350
Rapeseed	250-400

Elixir MICRO GRAN

The Elixir Micro Gran line of products includes microgranulated complex mineral fertilizers developed using the latest technologies:

✓ **Dust Prills Free (DPF)** – prevents the appearance of dust particles in the final product

✓ **Microgran technology** – is specially designed for the production of granules with the size of 0.5-1.2 mm.

Elixir Zorka microgranulated starting fertilizers have a well-balanced ratio of nutrients, primary, secondary and essential microelements, which stimulate plant growth in the initial stages of development and contribute to a better rooting of the plant.

The goal of using microgranulated fertilizers is more precise dosing and distribution of mineral fertilizers for better use of nutrients by plants. Smaller granules allow for greater surface contact with soil, faster diffusion, and thus more efficient use by plants.

Super Start

Super Start is a microgranulated fertilizer that provides readily available nutrients to plants fastest, thus stimulating the growth of plants at the initial stages of development. Thanks to high content of phosphorus (P) and the presence of zinc (Zn), it stimulates the growth of the root system significantly. **Super Start** enables the cultivated crop culture to withstand stressful conditions that may arise at the initial stages of development and leave significant consequences on the plant and expected yield.
Economic effects of the application of Super Start fertilizer are obvious already in the first year of application, especially in limiting conditions for the development of the plant.

SuperStart	NP 10:35	NP 10:40	NP 10:45
Total NITROGEN (N)	10.00%	10.00%	10.00%
Ammoniacal nitrogen	10.00%	10.00%	10.00%
PHOSPHORUS PENTOXIDE (P_2O_5) total	35.00%	40.00%	45.00%
Phosphorus pentoxide (P_2O_5) soluble in water	30.00%	36.00%	40.00%
MAGNESIUM-OXIDE (MgO) total	2.00%		
Sulphur (S) soluble in water	5.00%	5.00%	5.00%
Zinc (Zn) total	2.00%	1.00%	1.00%

RECOMMENDED METHOD OF APPLICATION
Super Start is applied together with sowing with the assistance of the micro granules depositing devices that are installed in the sowing machine. The recommended method of application is to introduce it directly into a row with a seed and it can also be used by physical mixing with soil insecticides in order to carry out simultaneous nourishing and protection of spring row crops.

Key reasons for application

- ✓ Intensifies and accelerates initial growth of a young plant
- ✓ Helps plants to develop a large and powerful root system
- ✓ Ensures more efficient sprouting and a larger number of plants per unit measure of surface
- ✓ Reduces negative effects of pathogens on plant growth and development
- ✓ Ensures high efficiency of utilization of nutrients from Super Start in the year of application
- ✓ Ensures better utilization of nutrients from soil reserves
- ✓ Ensures better utilization of water reserves from soil
- ✓ Significantly alleviates the negative influence of cold and wet soil on uptake of nutritive substances by the plant
- ✓ By faster initial growth the cultivated crop culture shadows the weed plants thus reducing the negative effects of weeds
- ✓ Has favourable effects on the length of grain fill
- ✓ Improves the product quality
- ✓ Improves storage properties of the product

Application recommendations	kg/ha
Corn	25-30
Rapeseed	25-40
Soya	25-30
Sunflower	25-30
Sugar beet	25-35
Cereals grains	20-40
Vegetables	20-60

NutriBOOST
NP 10:45

NutriBOOST is a micro-granular starter fertilizer with a special supplement applied ultra-localized with sowing or with line sowing.

NutriBOOST is a special fertilizer with a supplement that protects phosphorus (P) from blockage after introduction in soil, regardless of soil pH value (acidic, neutral or alkaline soil). When phosphorus (P) fertilizer is applied to soil, the largest part of negatively charged phosphorus (P) anions will form compounds with positively charged cations of calcium (Ca), iron (Fe), aluminium (Al) (they can be present in water or soil liquid phase), preventing its absorption from crops. This reduces the efficiency of the applied phosphorus (P).

With application of **NutriBOOST**, fertilizer phosphorus (P) is protected. The special supplement in the fertilizer protects phosphorus (P) from blockage since it prevents other elements such as Al, Fe or Ca to bind it and in that way to block phosphorus (P). This supplement provides the maximal utilization of nutrients from fertilizer and soil by plants during the period of intensive growth and development.
This new generation of fertilizer enables better and longer utilization of nutrients in the soil.

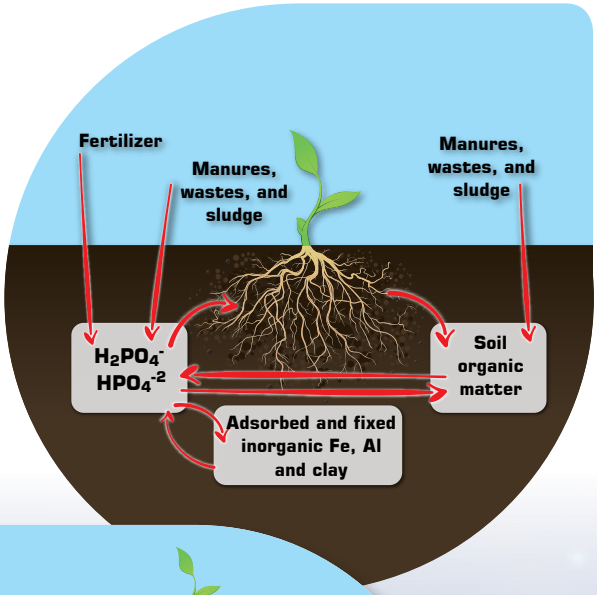
NutriBOOST is a combination of more specific advantages in one fertilizer.

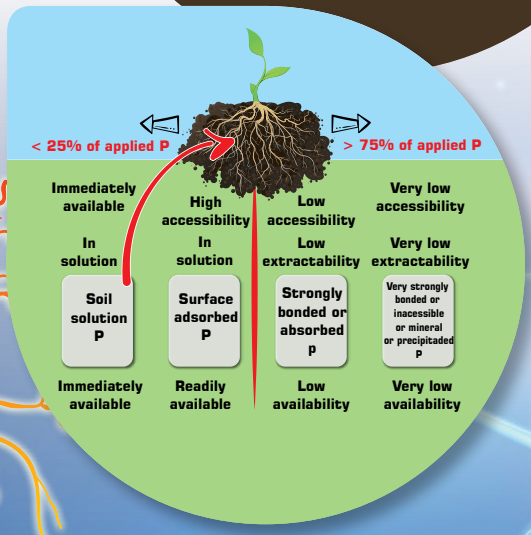
Total NITROGEN (N)	10.00%
Ammoniacal nitrogen	10.00%
PHOSPHORUS PENTOXIDE (P_2O_5) total	45.00%
Phosphorus pentoxide (P_2O_5) soluble in water	40.00%
Sulphur (S) soluble in water	5.00%
Zinc (Zn) total	1.00%

- ✓ Micro-granular fertilizer
- ✓ Starter fertilizer with nitrogen (N), phosphorus (P), sulphur (S), zinc (Zn)
- ✓ Fertilizer with raised water soluble phosphorus (P)
- ✓ Phosphorus (P) and zinc (Zn) are main factors of root development and initial growth of young plants
- ✓ It contains special supplement
- ✓ Granule size from 0.5 to 1.2 mm

The application of NutriBOOST has impact on:

- ✓ Better utilization of phosphorus (P) and other nutrients from soil and fertilizer
- ✓ The formation of deep and branched root system
- ✓ Better initial growth and development of young plants
- ✓ Better formation of uniformed lines
- ✓ Higher resistance of plants to stressful conditions





Application recommendations	kg/ha
Corn	20-30
Rapeseed	20-40
Soya	20-25
Sunflower	20-25
Sugar beet	25-30
Cereal grains	20-40
Vegetables	25-50

ElixirZorka

Elixir Zorka - Mineral Fertilizer Production Šabac

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* The recommendations given are approximate.
The amount should be adjusted to the production technology, chemical analysis of the soil, and the expected yield.