



FERTILIZER CATALOG

Feed people,

Enrich our lands,

Make everyone prosper

VERSION 1.0



Legend







Suitable for greenhouse applications

Usable in irrigation systems

Burial in the ground is necessary







Suitable for foliar application

Suitable for spring applications

Improved physical and chemical parameters for good width dispersion







Can be used in fertilizer blends

Suitable for fall applications

Low carbon footprint

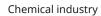






Fertilizers with improved characteristics

Mining industry









Big Bag

Bag

Bulk



NPK 15-15-15, NPKS 15-15-15-11, NPK 16-16-16,















Big Bag

Bag

Bulk

Complex fertilizers with a balanced composition of balanced nutrients. Suitable for all floors. Optimal as a main fertilizer for winter crops and as a pre-planting fertilizer for spring crops.

The sulfur content of 11% in NPKS 15-15-11 promotes the quality of agricultural products (increases the protein content of cereals and the oil content of oilseeds).



	NPK 15-15-15	NPK 15-15-11	NPK 16-16-16
Appearance	Granules from v	white to various shad	es of gray or pink
Mass fraction of total nitrogen (N), %	15	15	15
Including			
mass fraction of ammoniacal nitrogen, %.	8	15	8
Mass fraction of nitrate nitrogen, %	7		8
Mass fraction of phosphates in terms of P2O5,%			
	15	15	16
Mass fraction of digestive phosphates in terms of	1 -	4.5	16
P2O5,%	15	15	16
Mass fraction of potassium in terms of K2O,%	15	15	16
Mass fraction of Sulfur Sulfate in terms of S, min, %	15	15	10
Mass fraction of Sundi Sundie in terms of 3, min, %	_	11	_
Particle size distribution, % Mass fraction of			
granules, mm			
particle size less than 1 mm, max size	3	3	3
2-5 mm, min	90	90	90
size > 6.3mm	0	0	0
Friability, %	100	100	100



NPK 14-23-14















Balanced NPK 14-23-14 fertilizer with high phosphorus content. Promotes strong root establishment, early crop development, flowering, and fruiting. Suitable for all soils and a wide range of crops.

Recommended for cereals, vegetables, and fruit crops, both as a base fertilizer and during early growth stages. Granulated form allows easy handling and uniform application.

Granules from white to various shades of gray



Ap	pe	ar	ar	٦C	e:

Friability, %:

Mass fraction of total nitrogen (N), %:
• Including ammoniacal nitrogen, %:
Nitrate nitrogen, %:
Mass fraction of phosphates in terms
of P ₂ O ₅ , %:
Mass fraction of digestive phosphates
in terms of P ₂ O ₅ , %:
Mass fraction of potassium in terms of
K₂O, %:

Mass fraction of sulfur sulfate in terms of S, min, %:

Particle size distribution (mass fraction of granules, mm): Particle size <1 mm: max Particle size 2-5 mm: min Particle size >6.3 mm:

90% 0% ≥95

3%

14

23

14

<1



NPKS 10-20-10-5, NPKS 12-24-12-6 NPKS 14-23-14-6















Store in a dry, isolated place, away from moisture and direct sunlight.

Complex NPKS fertilizers with a high phosphorus content. Suitable for all crops and all soils. Used as a main fertilizer for winter crops, as well as a pre-planting and planting fertilizer for spring crops. Ideal for cereals and vegetables.

Also recommended for soils low in phosphorus.



	NPKS 10-20-10-5	NPKS 12-24-12-6	NPKS 14-23-14-6
Appearance	Granules from white	e to various shades of gi	ray or pink
Mass fraction of total nitrogen (N), % Including	10	12	14
mass fraction of ammoniacal nitrogen, %.	10	12	12
Mass fraction of nitrate nitrogen, % Mass fraction of phosphates in terms	-	-	2
of P2O5,% Mass fraction of digestive phosphates in	20	24	23
terms of P2O5,% Mass fraction of potassium in terms of K2O,%	20	24	23
	10	12	14
Mass fraction of Sulfur Sulfate in terms of S, min, %	5	11	6
Particle size distribution, % Mass fraction of granules, mm			
particle size less than 1 mm, max size	3	3	3
2-5 mm, min	90	90	95
size > 6.3mm	0	0	0
Friability, %	100	100	100



MultiStart NPKS 15-15-15-11 + Organic











Big bag

Complex bio-modified fertilizer containing the main nutrients (nitrogen, phosphorus, potassium and sulfur), as well as rhizospheric bacteria Bacillus subtilis. Once in the soil, bacteria produce auxins which stimulate the development of the root system and increase its absorption and also produce organic acids which increase the content of water-soluble forms of phosphorus in the soil. Microorganisms present in the fertilizer inhibit the activity of pathogens in the rhizomes and increase the bacterial and fungal resistance of the plant. Fertilizer increases the biological activity of the soil, improves crop yield and the quality of agricultural products, and also promotes business profitability. Used for main application (with surface burial) and application at planting time. Ideal for spring crops and cereals

Store in a dry, isolated place away from moisture and direct sunlight, at a temperature of -40 $^{\circ}$ C +40 $^{\circ}$ C. Guaranteed shelf life - 1 year. Shelf life 2 years.



Appearance	Granules from white to different shades of gray or rose
Mass fraction of total nitrogen (N), % Including	15
mass fraction of ammoniacal nitrogen, %.	15
Mass fraction of phosphates in terms of P2O5,%	15
Mass fraction of digestive phosphates in terms of P2O5,% min Mass	15
fraction of potassium in terms of K2O,%. Viable bacterial cells per 1 gram of fertilizer, min, CFU/g	11 5×104
Particle size distribution, in %. Mass fraction of granules, mm	
Particle size less than 1 mm, max Size	3
1-5 mm, min Size > 6mm	90 0
Friability, %	100



NPKS 10-20-10-5, NPKS 12-24-12-6 NPKS 14-23-14-6















Store in a dry insulated place, away from moisture and direct sunlight.

Complex NPKS fertilizers with high phosphorus content Suitable for all crops and all soils. Used as a main fertilizer for winter crops, as well as a pre-planting and planting fertilizer for spring crops. Ideal for cereals and vegetables.

Also recommended for soils low in phosphorus



	NPKS 10:20:10:5	NPKS 12:24:12:6	NPKS 14:23:14:6
Appearance	Granules from white to	various shades of gra	ay or pink
Mass fraction of total nitrogen (N), % Including	10	12	14
mass fraction of ammoniacal nitrogen, %.	10	12	12
mass fraction of amide nitrogen, in % Mass fraction of total phosphates in	-	-	2
terms of P2O5, % Mass fraction of digestive phosphates in terms of	20	24	23
P2O5,% min Mass fraction of potassium in terms of K2O, %	20	24	23
	10	12	14
Mass fraction of sulfur sulfate in terms of S, min, % Particle size distribution, in %.	5	6	6
Mass fraction of granules, mm			
Particle size less than 1 mm, max Size 2-5 mm, min Size > 6.3mm	3 90 0	3 90 0	3 95 0
Friability, %	100	100	100



NPKS 8-20-30-3+0.015Zn, NPKS 15-15-6+1 B, NPKS 14-18-18-6+0.3 B, NPKS 15-20-15-6+0.3AT+0.3Zn













Complex NPKS fertilizers with trace elements. Ensures complete nutrition thanks to a balanced composition and the presence of trace elements in a single granule. Suitable for all crops and all soils. Boron is necessary for normal cell division and growth; it also promotes the transportability and storage of agricultural products.

Zinc promotes the growth of the root system and the absorption of nutrients from the soil, increases the content of proteins and carbohydrates contained in agricultural products. Effective as a main planting fertilizer for all crops



NPKS 8:20:30:3	NPKS 15:15:15:6+1B	NPKS14:18:18:6+0.3B	NPKS15:20:15:6+0.3B+0.3Zr

Appearance			Pink and grayish pink granu	les
Mass fraction of total nitrogen (N), %	8	15	14	15
Including mass fraction of ammoniacal nitrogen, % mass fraction of amide nitrogen, % Mass fraction of total phosphates in terms of P2O5, % Mass fraction of digestive phosphates in terms of P2O5, % Mass fraction of potassium in terms	8 - 20 20 30	11 4 15 15	12 2 18 18	12 3 20 20
of K2O,%				
Mass fraction of sulfur sulfate in terms of S min, % Mass fraction of Zinc, % Mass fraction of Zinc, % Particle size distribution,	_	6 - 1	6 - 0.3	6 0.3 0.3
%. Mass fraction of granules, mm				
Particle size less than 1 mm, max Size				
2-5 mm, min	3	3	3	3
61 62	95	95	95	95
Size > 6.3mm	0	0	0	0
Friability, %	100	100	100	100



Granules Pink MOP K60









Mass fraction of potassium, in terms of K2O, %,

Suitable for direct application to soil and in fertilizer mixtures. Suitable for all soils and all crops

60





Big bag

Bulk

Store in a dry and isolated placewas at shelter from humidityeand lightere direct sunlight.



Mass fraction of water, %, max	0.5
Particle size distribution, %	
Mass fraction of granules:	
Size less than 1mm, max	0
Size 1-4 mm, min Size > 6 mm Dynamic force, %, min	95 5 80
Friability, %	100



UREA

No. 46.2







Big bag

Store in a dry, isolated place, away from moisture and direct sunlight.

The most concentrated nitrogen fertilizer. Prolonged nitrogen nutrition for the plant. Requires incorporation into soil immediately after application. Fully soluble in water. Suitable for irrigation systems.



Appearance Mass fraction of total nitrogen (N), in %.	White granules 46.2
Buriet mass fraction, max, %. Particle size	1.0
distribution, % Mass fraction of pellets smaller than 1mm, max.	5 (3)*
Size 1 - 4 mm, min Size > 6mm Friability, %	94 0 100

On request, urea can be treated with an anti-caking agent *Variable depending on production facilities



Calciumammonium nitrate 27N+12CaO











Big bag

Bulk

Store in a dry, isolated place, away from moisture and direct sunlight.

Neutral nitrogen fertilizers. A safety mark for fertilizers rich in nitrogen.

The presence of calcium carbonate prevents soil acidification.

Contains equal amounts of ammonium and nitrogen forms for prolonged plant nutrition.

Calcium contributes to the development of the Root system and increases resistance to diseases and parasites. Excellent physical and chemical characteristics for ease of storage and application. Suitable for all soils and all crops (requires burial in the ground)



Appearance Total mass fraction of nitrogen (N), %	White-gray granules
Including	27
Mass fraction of ammoniacal nitrogen Mass	13.5
fraction of nitrate nitrogen	13.5
Mass fraction of Calcium in terms of CaO,% Mass	12
fraction of calcium nitrate	1
Particle size distribution, % Mass fraction of granules: Size less than 1mm, max.	
Size 1 - 4 mm, min	3
Size > 6mm	90
Friability, %	0
	100



Ammonium nitrate No. 34.4















Big bag

in bulk

Store in a dry, isolated place, away from moisture and direct sunlight.

Highly concentrated multipurpose nitrogen fertilizer containing ammonium and nitrate forms of nitrogen in equal amounts for prolonged plant nutrition. Suitable for direct application to the ground and in fertilizer mixtures. Excellent physical and chemical characteristics for ease of storage and application. Fully soluble in water.

Suitable for all soils and all crops. More efficient for feeding complementary in spring and summer

0 0 0 0	
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	in the second

Appearance	Granules White or lightly colored
Total mass fraction of nitrogen (N), %	24.4
Including	34.4
Mass fraction of ammoniacal nitrogen	17.2
Mass fraction of nitrate nitrogen	17.2
Particle size distribution, % Mass fraction	
of	
granules:	
Size less than 1mm, max.	3
Size 1 - 4 mm, min	95
Size > 6mm	
Friability, %	0
	100

[!] On request, ammonium nitrate can be treated with an anti-caking agent (not suitable for greenhouse applications).



Di-Ammonium Phosphate (DAP) NP 18:46







Big bag

Bag

Annogrance

Bulk

The most concentrated fertilizerwas atphosphate base. It is perfect for any agricultural crop to provide complete nutritionete in phosphorus throughout growth and de development of crops, as well as a dose of denitrogen and low sulfur content. He

canebe appliedwas atin the fall whenplowing and the spring when sowing as well as for cultivation before sowing. Dissolving in the soil, it temporarily alkalizes the pH of the soil solution around the fertilizer granule, thereby stimulating better absorption of phosphorus from fertilizers on acidic soils. The sulfur in the fertilizer contributes ealsohasbetter absorption of nitrogen and phosphorus by plants.

Color Light brown

Shelf life: Bulk - 6 months from date of manufacture

In bags or Big Bag – 12 months from the date of manufacture .



Appearance	
Total nitrogen (N), % Total	18 ±1
phosphates (P2O5), %	47 ±1
Humidity, %, maximum	1.5 ± 0.3
Granulometry, %	
- between 1-mm, % min	-
- between 2-5 mm, % min	95
Static strength of granules,	
MPa (kgs/cm2), min	3.0 (30)

DAP is non-toxic, non-combustible and non-explosive.



AmmoniumNitrate (for mining)

(ONE)NH4NO3

CAS number: 6484-52-2 HSCODE:310230







Big bag

Transport by rail, road and water in accordance with current regulations. Store in a dry and insulated place.

Ammonium nitrate is used as the primary primary oxidant in various types of industrial explosives. Ammonium nitrate is used as a raw material to produce emulsion explosives, which are prepared directly at drilling and blasting sites or in stationary factories to produce big bag IE (industrial explosives)



White or lightly colored granules without mechanical impurities

Appearance

Total Nitrogen (N)

Humidity

Particle size composition:

Below 1mm1-4mmUnder 6.0mm

Static strength of granules

Density:

- In bulk

- Exploited Angle of repose Free circulation

34.4% maximum 0.3% maximum

3%maximum 95% minimum

100%

2MPa min

950 kg/m3

1250 kg/m³

20hours

100%







Classification according to Regulation (CE) No. 1272/2008 [CLP] Oxidizingsolid,category 3 H272 Serious eye damage/eye irritation, Category 2 H319

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Mini operationeD





Chemical industry





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