Doğatech

Discover the Power

- Nitrification Inhibitor Fertilizers
- Liquid Fertilizers
- Micro Elements

dogatech.arge

Doğatech-AR-GE

dogatech-arge

PRODUCT CATALOGUE

about us

DOĞATECH was founded in 2015 as a Research and Development company under the Erciyes University's Technology Development Centre (TEKNO PARK) by a group of academicians (Prof. Mustafa BAŞARAN and Asst. Prof. Oğuzhan UZUN) from the Department of Soil Science and Plant Nutrition of Erciyes University with the aim of producing eco-friendly fertilizers that minimizes environmental pollution while making fertilizer use more profitable.

After years research, a Nitrification Inhibitor 3-5, Dimethylpyrazole GlyceroBorate (DMPB) was developed which when incorporated with ammonium (NH_4+) base nitrogen fertilizers inhibits the growth and development of Nitrasomonas and Nitrococus bacteria. As such the transformation of NH_4+ into NO_3- and the subsequent nitrogen losses through leaching and volatilization is prevented while at the same time ensuring the availability of nitrogen in the form of NH_4+ for up to 8 weeks depending soil and weather conditions.

The DMPB is incorporated into various fertilizer formulations and registered under the trademark of DOĞATECH. Our high-tech products were tested on farmer fields and compared with equivalent products. Based on the soil characteristics and prevailing weather conditions,10-40% yield improvements were achieved and much higher performances were observed with our products than its equivalents.

Our ultimate goal is to continue to invest more into Research and Development and to become a leading company in the plant nutrition sector globally. We are proud of having the newest nitrification inhibitor fertilizer product of the world. We wish all farmers good luck with our high-tech products.

Best regards,
Doğatech AR-GE A. Ş. Board of Directors.

nitrification inhibitor fertilizers

PATENT NUMBER
2014/15391

about DMPB nitrification inhibitor fertilizers

Nitrogen is one of the most required minerals by plants and its deficiency is what limits crops productivity the most. Nitrogenous fertilizers are the most produced and the most used fertilizers in crop production. However, it is estimated that, about half of nitrogen applied to crops is lost through leaching or volatilization and thus leading to low crop outputs while causing serious economic loses. Aside crop yield, nitrogen leaching causes groundwater pollution whereas its volatilization in the form of nitrous oxide (NO_2) also contributes to global warming.

Crops take up nitrogen in the form of NH_4+ (ammonium) and NO_3- (nitrate). The NH_4+ form of nitrogen is the best for plants as it can be readily used without any further processing. Also, the NH_4+ form of nitrogen is not leachable as the negative charged soil particles (such as clay and organic matter) bonds with the positively charged NH_4+ molecules and thus preventing nitrogen leakage. On the other hand, NO_3- has negative charges and cannot be held by clay and organic matter with same charges and is therefore easily leached through the soil profile with excessive precipitation or irrigation.

Though NH_4+ form of nitrogen is best for the crop and the environment, Nitrasomonas and Nitrococus bacteria also uses it to meet their energy demands and transform it (NH_4+) into nitrate (NO_3-) within a week or two depending on prevailing environmental conditions. Nitrate will then be leached through the soil profile or further converted to volatile NO_2 gases.

To minimize this, our company has developed a nitrification inhibitor, patented under the name 3,5-Dimethylpyrazole glyceroborate (DMPB) which we incorporate with our NH_4+ base nitrogen fertilizers. It functions to inhibit the growth and development of Nitrasomonas and Nitrococus bacteria and therefore preventing the transformation of NH_4+ into NO_3- and subsequently nitrogen losses through leaching and volatilization is prevented while at the same time ensuring nitrogen availability in the form of NH_4+ for longer periods.

Our fertilizers come with different formulations as in our catalogue. We have also added some micro elements such as boron, ferrous iron (ortho-ortho), magnesium and sulphur to our formulation. And with that the application of micro elements may be reduced by half or may not be required at all.

With our fertilizers,

- About 10-20% higher yields than classical fertilizers can be obtained.
- Plant energy utilization in NO_3- reduction is minimized.
- Soil pH is reduced very effectively. No need to apply Sulphur treatments.
- Bud formation is promoted. Fruit set is increased.
- Quality is improved in fruits and vegetables.
- Shelf life is prolonged and market value is increased.
- Excessive shoot development in fruit trees is decreased.
- 70% of iron and 30% of boron requirements are also met with our fertilizers.

base fertilizers

Basic 18-18-5 (32 SO_3)
Basic 14-14-17 (25 SO_3)
Basic 18-6-6+(48 SO_3)
Basic 25-10-0 (2 MgO)
Maxgreen 20-5-10

BASIC
18-18-5 (32 SO_3)

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	18
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	18
Total Phosphorus Pentoxide **(P_2O_5)**	18
Phosphorus Pentoxide **(P_2O_5)** - Water soluble	16
Potassium Oxide **(K_2O)** - Water soluble	5
Total Sulphur Trioxide **(SO_3)**	32
Nitrification Inhibitor **(DMPB)**	0,22

PROPERTIES

Doğatech Basic 18-18-5 is a granular fertilizer containing 18% Nitrogen, 18% Phosphorus (P_2O_5) and 5% Potassium (K_2O). In Doğatech Basic 18-18-5 fertilizer, all of ammonium nitrogen has DMPB inhibitor and thus stays in plant root area for longer time without being leached or volatilized. Enhances strong root development, rapid growth, tillering and spike formation.

USAGE TIME, FORM AND QUANTITY

Apply during land preparation or together with seeds at planting. Should be buried and not be exposed to the weather.

PLANTS	SOIL APPLICATION
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	200-250 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	200-250 kg/ha
Leafy Vegetables (Lettuce, Cabbage, etc.)	200-250 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	200-400 kg/ha
Citrus and Banana	200-400 kg/ha
In vineyards	100-200 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	400-500 kg/ha

BASIC
14-14-17 (25 SO_3)

GUARANTEED CONTENT %W/W

Total Nitrogen **(N)**	14
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	14
Total Phosphorus Pentoxide **(P_2O_5)**	14
Phosphorus Pentoxide **(P_2O_5)** - Water soluble	13
Potassium Oxide **(K_2O)** - Water soluble	17
Total Sulphur Trioxide **(SO_3)**	25
Nitrification Inhibitor **(DMPB)**	0,22

PROPERTIES

Doğatech Basic 14-14-17 + (25 SO_3), containing 14% ammonium (NH_4-N) nitrogen, 14% P_2O_5, 17% K_2O and 25% SO_3 is a special fertilizer that prevents the losses of nitrogen in the form of gas and washing by delaying the nitrification of ammonium nitrogen by 4-8 weeks depending on prevailing soil conditions.

USAGE TIME, FORM AND QUANTITY

This formulation is much suitable for soils deficient in potassium and crops with high demand for potassium throughout their growing cycle. Apply during land preparation or together with seeds at planting. Should be buried and not be exposed to the weather.

CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	400-500 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	400-500 kg/ha
Leafy Vegetables (Lettuce, Cabbage, etc.)	300-400 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	500-600 kg/ha
Citrus and Olives	500-600 kg/ha
Banana	800-1000 kg/ha
In vineyards	200-205 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	500-600 kg/ha

BASIC
18-6-6+(48SO_3)

GUARANTEED CONTENT %W/W

Total Nitrogen **(N)**	18
Ammonium Nitrogen **(NH_4- N)** (with DMPB Inhibitor)	18
Total Phosphorus Pentoxide **(P_2O_5)**	6
Phosphorus Pentoxide **(P_2O_5)** - Water soluble	6
Total Phosphorus Pentoxide **(K_2O)**	6
Potassium Oxide **(K_2O)** - Water soluble	6
Total Sulphur Trioxide **(SO_3)**	48
Nitrification Inhibitor **(DMPB)**	0,21

PROPERTIES

DOĞATECH BASIC 18-6-6 is a granular fertilizer containing 18% Nitrogen, 6% Phosphorus (P_2O_5) and 6% Potassium (K_2O). In DOĞATECH BASIC 18-6-6 fertilizer, all of ammonium nitrogen has DMPB inhibitor and thus stays in plant root area for longer time without being leached or volatilized. Suitable for use

USAGE TIME, FORM AND QUANTITY

Suitable for use on soils with optimal amounts of phosphorus and potassium. Apply during land preparation or together with seeds at planting. Should be buried and not be exposed to the weather.

CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	400-500 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	250-300 kg/ha
Leafy Vegetables (Lettuce, Cabbage, etc.)	150-200 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	250-300 kg/ha
Citrus and Banana	300-400 kg/ha
In vineyards	300-400 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	400-500 kg/ha

BASIC
25-10-0 (2 MgO)

GARANTİ EDİLEN İÇERİK	%W/W
Total Nitrogen **(N)** (with DMPB Inhibitor)	25
Urea Nitrogen **(NH_2-N)**	21.5
Total Phosphorus Pentoxide **(P_2O_5)**	10
Phosphorus Pentoxide **(P_2O_5)** - Water Soluble	8
Total Magnesium **(MgO)**	2
Nitrification Inhibitor **(DMPB)**	0,3

PROPERTIES

Doğatech Basic 25-10-0 + 2 MgO is a granular fertilizer containing 25% Nitrogen, 10% Phosphorus and 2% Magnesium. The ammonium contained in this Fertilizer is fully coated with DMPB nitrification inhibitor, which protects the nitrogen in the plant root zone from being leached or volatilized for a at least 6 weeks. With its high nitrogen content, it is formulated to meet the plant's needs of nitrogen, phosphorus and magnesium in soils with sufficient potassium levels. This can be used as a starter Fertilizer

USAGE TIME, FORM AND QUANTITY

Apply during land preparation or together with seeds at planting. Should be buried and not be exposed to the weather.

CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	200-250 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	200-250 kg/ha
Leafy Vegetables (Lettuce, Cabbage, etc.)	200-250 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	200-400 kg/ha
Citrus and Banana	200-400 kg/ha
Vineyards	100-200 kg/ha
Maize, Sugar Beet, Potato, Cotton etc.	200-250 kg/ha

MAXGREEN
20-5-10

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	20
Ammonium Nitrogen **(NH_4- N)** (with DMPB Inhibitor)	11
Urea Nitrogen **(NH_2-N)**	9
Total Phosphorus Pentoxide **(P_2O_5)**	5
Phosphorus Pentoxide **(P_2O_5)** - Water soluble	5
Total Phosphorus Pentoxide **(K_2O)**	10
Potassium Oxide **(K_2O)** - Water soluble	9
Nitrification Inhibitor **(DMPB)**	0,24

PROPERTIES

Doğatech MAZGREEN 20-5-10 is a granular fertilizer containing 20% Nitrogen, 5% Phosphorus (P_2O_5) and 10% Potassium (K_2O). All of the ammonium nitrogen in MAXGREEN is coated with DMPB inhibitor, which helps keep the nitrogen in plant root zone for alonger time without being leached or volatilized.

USAGE TIME, FORM AND QUANTITY

Can be applied 1 to 4 applications during throughout the entire growing season.

CROP	DOSAGE
Leafy Vegetables	200-250 Kg/ha
Potato, Sugar Beet	400-500 Kg/ha
Tea, Hazels and Ornamental plants	300-400 Kg/ha
Lawns, Sports fields, Parks etc.	25-30 g/m^2

water soluble fertilizers

Stable N-21: 21-0-0
Stable N-30: 30-0-0
Stable N-36: 36-0-0
Stable P-30: 16-30-0+(30 SO_3)
Stable P-46: 14-46-0 (15 SO_3)
Stable K-25: 10-0-25+(50 SO_3)
Stable K-38: 5-0-38 (49 SO_3)

STABLE N-21
21-0-0

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	21
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	21
Total Sulphur Trioxide **(SO_3)**	60
Nitrification Inhibitor (DMPB)	0,25

PROPERTIES

Doğatech Stable N-21 contains 21% ammonium (NH_4-N) nitrogen. Due to the DMPB nitrification inhibitor in its composition, it is a special fertilizer which prevents Nitrogen (N) losses through leaching and volatilization by delaying the nitrification of ammonium nitrogen by 4-8 weeks depending on soil temperature and pH.

USAGE TIME, FORM AND QUANTITY

It is recommended that the estimated amount of nitrogen to be used for fruit, vegetable and industrial plants be given at the beginning of sowing, planting or vegetative development with 1/4 phosphorous and potassium fertilizers, the remaining amount should be given in 2-4 parts during ripening and fruit growing, and nitrogen fertilization should be completed or reduced during ripeningperiod.

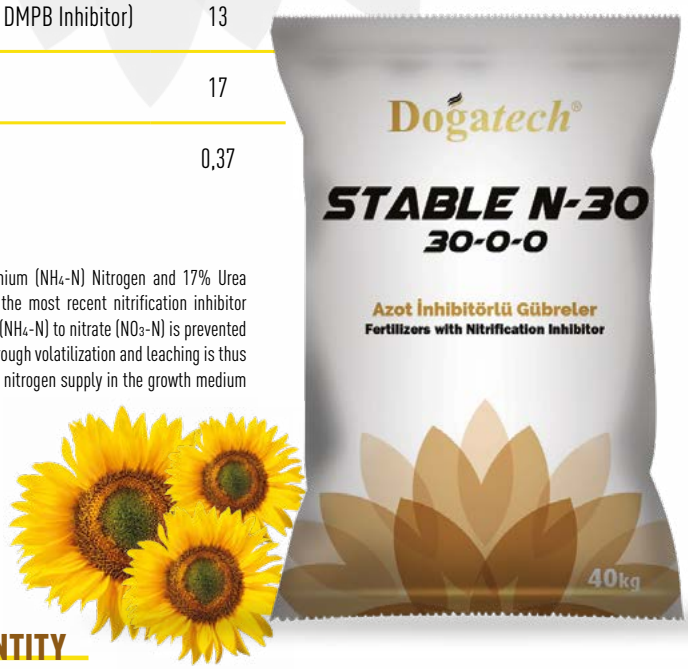
CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	500-600 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	400-500 kg/ha
Leafy Vegetables (Lettuce, Cabbage, etc.)	300-400 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	400-600 kg/ha
Citrus and Olives	500-700 kg/ha
Banana	800-1000 kg/ha
In vineyards	300-400 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	600-800 kg/ha

STABLE N-30
30-0-0

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	30
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	13
Urea Nitrogen **(NH_2-N)**	17
Nitrification Inhibitor **(DMPB)**	0,37

PROPERTIES

Doğatech Stable N-30 contains 13% Ammonium (NH_4-N) Nitrogen and 17% Urea (NH_2-N) nitrogen. With the incorporation of the most recent nitrification inhibitor DMPB, the conversion of ammonium nitrogen (NH_4-N) to nitrate (NO_3-N) is prevented or minimized for 4-8 weeks. Nitrogen loses through volatilization and leaching is thus prevented and thus providing a more efficient nitrogen supply in the growth medium for longer periods.



USAGE TIME, FORM AND QUANTITY

It is recommended that the estimated amount of nitrogen to be used for fruit, vegetable and industrial plants be given at the beginning of sowing, planting or vegetative development together with 1/4 of phosphorous and potassium fertilizers. The remaining amount should be given in 2-4 parts during ripening and fruit growing, and nitrogen fertilization should be completed or reduced during ripening period.

PLANTS	DOSAGE
Seedlings	200-300 kg/ha
New fruit bearing trees	300-500 kg/ha
Fruit bearing trees (normal yield)	250-300 kg/ha
Fruit bearing trees (high yield)	300-450 kg/ha
Citrus and Olives trees	400-600 kg/ha
Vineyard	250-300 kg/ha
Greenhouse vegetables (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	305-500 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	300-350 kg/ha
Banana	600-700 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	400-600 kg/ha
Annual/perennial flowers and lawns	15-25 g/plant

STABLE N-36
36-0-0

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	36
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	8
UreaNitrogen **(NH_2-N)** (withDMPBInhibitor)	28
Total Sulphur Trioxide **(SO_3)** - Water Soluble	24
Nitrification Inhibitor **(DMPB)**	0,45

PROPERTIES

Doğatech Stable N-36 contains 8% ammonium (NH_4-N) and 28% urea (NH_2-N) nitrogen. Due to the DMPB nitrification inhibitor in its composition, it is a special fertilizer which prevents Nitrogen through leaching and volatilization by delaying the nitrification of ammonium nitrogen by 4-8 weeks depending on soil temperature and pH.

USAGE TIME, FORM AND QUANTITY

It is recommended that the estimated amount of nitrogen to be used for fruit, vegetable and industrial plants be given at the beginning of sowing, planting or vegetative development with 1/4 phosphorous and potassium fertilizers, the remaining amount should be given in 2-4 parts during ripening and fruit growing, and nitrogen fertilization should be completed or reduced during ripeningperiod.

CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	300-400 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	250-300 kg/ha
Leafy Vegetables (Lettuce, Cabbage, etc.)	200-250 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	250-400 kg/ha
Citrus and Olives	300-500 kg/ha
Banana	500-600 kg/ha
In vineyards	200-250 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	400-600 kg/ha

STABLE P-30
16-30-0+(30 SO_3)

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	16
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	16
Total Phosphorus Pentoxide **(P_2O_5)** - Water Soluble	30
Sulphur Trioxide **(SO_3)** - Water soluble	30
Nitrification Inhibitor **(DMPB)**	0,18

PROPERTIES

DOĞATECH Stable P-30 contains 16% Nitrogen and 30% Phosphorus (P_2O_5). It is Nitrogen Phosphorus (NP) fertilizer and completely soluble in water. It is preferably applied through drip irrigation. The ammonium nitrogen in DOĞATECH Stable P-30 fertilizer is coated with DMPB nitrification inhibitor which helps keep nitrogen in plant root zone for longer periods without being leached.

USAGE TIME, FORM AND QUANTITY

It is recommended that 1/2 of the estimated amount of phosphorus for use in fruit, vegetable and industrial plants should be given at the beginning of sowing, planting or vegetative development and the remaining amount be given during ripening period in 2-3 parts.

CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini etc.)	200-250 kg/ha
Strawberry, Watermelon, Melon, Pumpkin etc.	150-200 kg/ha
Leaf Eaten Vegetables (Lettuce, Cabbage, etc.)	120-15 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	150-200 kg/ha
Citrus and Olives	15-200 kg/ha
Banana	800-1000 kg/ha
In vineyards	120-150 kg/ha
Maize, Sugar Beet, Potato, Cotton etc.	200-250 kg/ha

STABLE P-46
14-46-0 (15 SO_3)

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	14
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	14
Total Phosphorus Pentoxide **(P_2O_5)** - Water soluble	46
Total Sulphur Trioxide **(SO_3)** - Water soluble	15
Nitrification Inhibitor **(DMPB)**	0,06

PROPERTIES

Doğatech Stable P-46 contains 14% Nitrogen and 46% Phosphorus (P_2O_5). It is Nitrogen-Phosphorus (NP) fertilizer and completely soluble in water. It is preferably applied through drip irrigation. In Doğatech Stable P-46 fertilizer, 5% of ammonium nitrogen has DMPB inhibitor and thus stays in plant root area for long periods without being leached.

USAGE TIME, FORM AND QUANTITY

It is recommended that 1/2 of the estimated amount of phosphorus for use in fruit, vegetable and industrial plants should be given at the beginning of sowing, planting or vegetative development and the remaining amount be given during ripening period in 2-3 parts.

CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	150-200 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	100-150 kg/ha
Leaf Eaten Vegetables (Lettuce, Cabbage, etc.)	80-100 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	100-150 kg/ha
Citrus and Olives	100-150 kg/ha
Banana	150-200 kg/ha
In vineyards	80-100 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	150-200 kg/ha

STABLE K-25
10-0-25+(50 SO_3)

GUARANTEED CONTENT %W/W

Total Nitrogen **(N)**	10
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	10
Total Potassium Oxide **(K_2O)** - Water Soluble	25
Total Sulphur Trioxide **(SO_3)** - Water soluble	50
Nitrification Inhibitor **(DMPB)**	0,12

PROPERTIES

DOĞATECH Stable K-25 contains 10% Nitrogen and 25% Potassium (K_2O). It is Nitrogen- Potassium (NK) fertilizer and completely soluble in water. It is preferably applied through drip irrigation. In DOGATECH Stable K-38 fertilizer, all of the Ammonium Nitrogen has DMPB inhibitor and thus stays in plant root area for long periods without being leached.

USAGE TIME, FORM AND QUANTITY

It is recommended that the amount of potassium to be used for fruit, vegetable and industrial crops should be given at the beginning of sowing, planting or vegetative development together with 1/4 phosphorous fertilizers, and the remaining amount should be given in 2-3 parts close to ripening period.

CROP	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	200-250 kg/ha
Strawberry, Watermelon, Melon, Pumpkin etc.	150-200 kg/ha
Leaf Eaten Vegetables (Lettuce, Cabbage etc.)	120-150 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	150-200 kg/ha
Citrus and Olives	150-200 kg/ha
Banana	800-1000 kg/ha
In vineyards	120-150 kg/ha
Maize, Sugar Beet, Potato, Cotton etc.	200-250 kg/ha

STABLE K-38
5-0-38 (49 SO_3)

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	5
Ammonium Nitrogen **(NH_4-N)** (with DMPB Inhibitor)	5
Total Potassium Oxide **(K_2O)** - Water Soluble	38
Total Sulphur Trioxide **(SO_3)** - Water soluble	49
Nitrification Inhibitor **(DMPB)**	0,06

PROPERTIES

DOĞATECH Stable K-38 contains 5% Nitrogen and 38% Potassium (K_2O). It is Nitrogen-Potassium (NK) fertilizer and completely soluble in water. It is preferably applied through drip irrigation. In DOGATECH Stable K-38 fertilizer, all of the Ammonium Nitrogen has DMPB inhibitor and thus stays in plant root area for long periods without being leached.

USAGE TIME, FORM AND QUANTITY

It is recommended that the amount of potassium to be used for fruit, vegetable and industrial crops should be given at the beginning of sowing, planting or vegetative development together with 1/4 phosphorous fertilizers, and the remaining amount should be given in 2-3 parts close to ripening period.

CROPS	DOSAGE
Greenhouse Plants (Tomato, Cucumber, Eggplant, Pepper, Zucchini, etc.)	150-200 kg/ha
Strawberry, Watermelon, Melon, Pumpkin, etc.	100-150 kg/ha
Leaf Eaten Vegetables (Lettuce, Cabbage, etc.)	80-100 kg/ha
Fruit trees (Apples, Pears, Peaches, etc.)	10-150 kg/ha
Citrus and Olives	10-150 kg/ha
Banana	900-1000 kg/ha
In vineyards	80-100 kg/ha
Maize, Sugar Beet, Potato, Cotton, etc.	150-200 kg/ha

liquid fertilizers

Kalsinit
Kalsifert-18
Potas 5-0-30
Soil Therapy
Solarex

KALSINIT

GUARANTEED CONTENT	%W/W
Calcium Oxide **(CaO)**	18
Nitrate Nitrogen **(NO_3-N)**	7,5
Ammonium Nitrogen **(NH_4-N)**	0,5

Do not mix with polysulphide, mineral oils and heavy alkaline compounds.

USAGE TIME, FORM AND QUANTITY

In plants such as tomatoes and apples where calcium deficiency significantly affects yield and quality, 3-5 applications of KALSINIT during the production season will eliminate or minimize the signs of deficiency. This product can be applied through spraying (folia application) or through an irrigation system. In folia applications, 200-300 cc should be added to 100 liters of water whereas 2-3 liters per hectare should be applied through an irrigation system. The product can be mixed with many known insecticides, fungicides and folia fertilizers.

KALSIFERT-18

GUARANTEED CONTENT	%W/W
Calcium Oxide **(CaO)**	18

Do not mix with polysulphide, mineral oils and heavy alkaline compounds.

USAGE TIME, FORM AND QUANTITY

In plants such as tomatoes and apples where calcium deficiency significantly affects yield and quality, 3-5 applications during the production season will eliminate or minimize the signs of deficiency. This product can be applied through spraying (folia application) or through an irrigation system. At temperatures above 25 °C, night application is recommended as it will reduce the risk of phytotoxicity. DOGATECH KALSIFERT-18 is a product designed for folia application and should be used as such at a dosage of 200-300 cc per 100 liters of water. Shake the vigorously before use. Pour the recommended dose of DOGATECH KALSIFERT-18 into a tank with 2/3 of clean water; mix and top up to mark.

The product can be mixed with many known insecticides, fungicides and folia fertilizers.

POTAS 5-0-30

GUARANTEED CONTENT %W/W

Potassium Oxide **(K_2O)**	30
Urea Nitrogen **(NH_2-N)**	5

MISCIBILITY

The product can be mixed with many known insecticides, fungicides and folia fertilizers. Do not mix with polysulphide, mineral oils and heavy alkaline compounds.

USAGE TIME, FORM AND QUANTITY

In plants such as tomatoes and apples where calcium deficiency significantly affects yield and quality, 3-5 applications during the production season will eliminate or minimize the signs of deficiency.

This product can be applied through spraying (folia application) or through an irrigation system. In folia applications, 200-300 cc should be added to 100 liters of water whereas 20-30 liters per hectare should be applied through an irrigation system.

SOIL THERAPY

Liquid Organomineral Fertilizer with Trace Elements

GUARANTEED CONTENT	%W/W
Organic content	19
Total (Humic + Fulvic) Acid	8
Boron **(B)**	0,2
Iron **(Fe)**	0,1
Manganese **(Mn)**	0,05
Zinc **(Zn)**	0,1

USAGE TIME, FORM AND QUANTITY

Application via drip irrigation is preferable. It can be applied by sprinkler irrigation or sprayer on non-edible leafy plants. Best application time is during the crop's vegetative growth phase.

Crop	Dosage (1L/100L water)
Citrus, Olive	100-200 L/ha
Hard and Pome Fruit Trees	100-200 L/ha
Open Field Vegetables (Tomato, Pepper, Eggplant)	100-200 L/ha
Greenhouse Vegetables Throughout the Season	100-200 L/ha
Cotton, Sunflower, Artichoke	200-300 L/ha
Strawberry	200-300 L/ha

Crop	Dosage (1L/100L water)
Banana	100-200 L/ha
Apple	100-200 L/ha
Watermelon, Melon	100-200 L/ha
Carrot, Radish	100-200 L/ha
Grapes (Vineyard)	100-200 L/ha
Sugar Beet, Potato, Onion	200-300 L/ha

SOLAREX

Sun Protection Product

GUARANTEED CONTENT	%W/W
Potassium Oxide **(CaO)**	13
Boron **(B)**	0,15
Maximum Chloride Content	15,5

SPECIFICA TIONS

Solarex, in the production of fruit, vegetable and industrial plants, prevents the sun's harmful ultraviolet (UV-B and UV-A) rays from causing stress conditions in plants, fruit discoloration and necrosis. It isa supportive product that extends shelf life and is developed to increasethe amount of marketable fruit and vegetables. The active ingredientof Solarex (Calcium Oxide) forms a film on fruit and leaf surfaces andreflects high levels of UV rays which cause excessive heating of leaf andfruit surfaces. It thus prevents the occurrence of temperature stressand minimizes stress-induced plant development, reduces plant water usage, reduces fruit colour degradation and the rate of necrosis formationby keeping the fruit surfaces cool. It does not leave stains like kaolin andcalcium carbonate on the surface of fruits and vegetables.

APPLICATION METHOD AND QUANTITY

SOLAREX is a liquid viscous product and can be discharged directly into a spraying can filled with water. Mixing vigorously will contribute to the homogeneous distribution of the product. Shakethe container before use. One litre of SOLAREX should be mixed with 500 litres of water.

4 applications should be done at a two-week interval to ensure maximum protection. The applicationshould be repeated after rain or strong winds as amount of active substance on the fruit and leafsurfaces will reduce.

SOLAREX should be applied under cool dry air conditions (preferably morning or evening) withlow wind velocities. SOLAREX is not suitable for use on plants where sprinkler irrigation is doneas the product will be washed off.

MISCIBILITY

SOLAREX can be mixed with many pesticides. Caution should however be taken when using with copper compounds. Preferably, it is recommended not to be used with copper containing compounds.

micro element group

Combi 10-5-5
Ferromin
Ferrokan
Çinko 13
Borozinc
Katı Deniz Yosunu

COMBi
10-5-5

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	10
Ammonium Nitrogen **(NH_4-N)**	10
Phosphorus Pentoxide **(P_2O_5)** - Water soluble	5
Potassium Oxide **(K_2O)** - Water soluble	5
Magnesium Oxide **(MgO)** - Water soluble	2
Boron **(B)** - Water Soluble	0,5
Copper (Cu) (EDTA chelated) – Water soluble	0,5
Iron **(Fe)** (EDTA chelated) – Water soluble	2
Manganese **(Mn)** (EDTAchelated) – Water soluble	1
Zinc **(Zn)** (EDTA chelated) – Water soluble	2
Copper EDTA chelate stablepH range	5-9
Iron EDTA chelate stable pH range	3-9
Manganese EDTA chelate stable pH range	4-11
Zinc EDTA chelate stable pH range	3-7

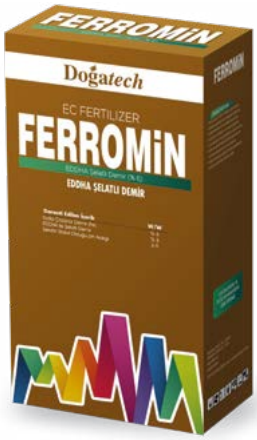
All Macro and Microelements are water soluble.Low biuret urea is used as nitrogen source.

MISCIBILITY

The product can be mixed with many known insecticides, fungicides and folia fertilizers. Do not mix with polysulphide, mineral oils and heavy alkaline compounds.

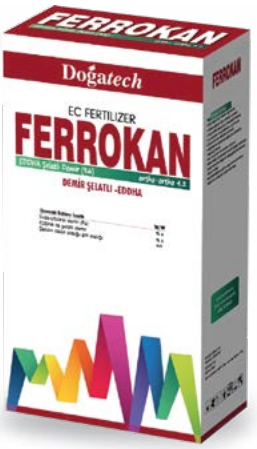
PLANT	DOSE	APPLICATION (DRIP IRRIGATION/FOLIAR)
Wheat, Barley, Rye, Oat, Rice, Triticale	1.5 kg/ha	Apply 1-3 times from tillering.
Cotton, Sugar Beet, Sunflower, Potato, Onion	2 kg/ha	From the start of leaf formation, application of 1-2 times isdone.
Maize, Tobacco, Rapeseed, Clover, Sainfoin, Grass	200 g/100 L	From the start of leaf formation, application of 1-2 times isdone.
Tomato, Eggplant, Pepper, Cucumber, Pumpkin, Melon, Watermelon, Okra, Leek	2 kg/ha	From the start of leaf formation, application of 1-2 times isdone.
Lettuce, Celery, Broccoli, Cabbage, Cauliflower, Spinach, Cress, Arugula, Parsley, Mint, Asparagus, Hops, Radish, Artichoke, Strawberry, Lentil, Chickpea, Vetch, Pea, Broad Bean, Bean, Ornamental plants	2 kg/ha	From the start of leaf formation, application of 1-2 times is done. Re-application is done at intervals of 7-15 days depending on necessity.
Apple, Pear, Peach, Apricot, Cherry, Grape, Citrus, Apple, Hazelnut, Pistachio, Pomegranate, Olive, Figs, Banana, Avocado, Kiwi, Plum, Walnut, Rose	2 kg/ha	In all fruit plants, 1-2 applications should be made after harvest and during leaf formation.

FERROMIN



GUARANTEED CONTENT	%W/W
Iron **(Fe)** (EDDHA chelated) – Water soluble	6
Iron **(Fe)** (Chelated by Ortho-Ortho EDDHA)	1,2
EDDHA chelated Iron stable pH range	3-9

FERROKAN



GUARANTEED CONTENT	%W/W
Iron **(Fe)** (EDDHA chelated) – Water soluble	6
Iron **(Fe)** (Chelated by Ortho-Ortho EDDHA)	4,5
EDDHA chelated Iron stable pH range	3-9

TIME OF APPLICATION

The application of either product is done when the first signs of iron deficiency is seen, and before the start of buds and flowers development in early spring. Even low doses create a complete greenery in trees in a short time. Therefore, the recommended dose should bedivided into two where intensive irrigation is done. The first application at the beginning of vegetative development and the second application to be done immediately after the fruit set.

PLANT	DOSAGE (BASE APPLICATION/DRIP IRRIGATION)
Seedlings	10-20 g/tree
New fruit bearing trees	20-50 g/tree
Fruit bearing trees (normal yield)	100-150 g/tree
Fruit bearing trees (high yield)	150-200 g/tree
Citrus (big trees)	200-300 g/tree
Vineyard	10-20 g/tree
Annual / perennial flowers and grass fields	0.6-1 kg/ha
Strawberry	50-100 g/100 meters row

ÇINKO 13

Micro Element Fertilizer

GUARANTEED CONTENT	%W/W
Zinc **(Zn)** - Water soluble	13
EDTA chelated Zinc **(Zn)**	10,4
EDTA chelated zinc stable pH range	3-7

MISCIBILITY

The product can be mixed with many known insecticides, fungicides and folia fertilizers. Do not mix with polysulphide, mineral oils and heavy alkaline compounds.

PLANT	DOSE	APPLICATION (FOLIAR)
Wheat, Barley, Rye, Oat, Rice, Triticale	1.5 kg/ha	Apply 1-3 times from tillering. For seed treatment, the recommended dose for 1 ton of seed is 2.5 kg.
Cotton, Sugar Beet, Sunflower, Potato, and Onion	2 kg/ha	From the start of leaf formation, application of 1-2 times is done.
Maize, Tobacco, Rapeseed, Clover, Sainfoin, Grass	2 kg/ha	From the start of leaf formation, application of 1-2 times is done.
Tomatoes, Eggplant, Peppers, Cucumber, Pumpkin, Melon, Watermelon, Okra, Leek	2 kg/ha	From the start of leaf formation, application of 1-2 times is done.
Lettuce, Celery, Broccoli, Cabbage, Cauliflower, Spinach, Cress, Arugula, Parsley, Mint, Asparagus, Hops, Radish, Artichoke, Strawberry, Lentil, Chickpea, Vetch, Pea, Broad Bean, Bean, Ornamental plants	2 kg/ha	From the start of leaf formation, application of 1-2 times is done. Re-application is done at intervals of 7-15 days depending on necessity.
Apple, Pear, Peach, Apricot, Cherry, Grape, Citrus, Apple, Hazelnut, Pistachio, Pomegranate, Olive, Fig, Banana, Avocado, Kiwi, Plum, Walnut, Rose	2 kg/ha	In all fruit plants, 1-2 applications should be made after harvest and during leaf formation.

BOROZINC

Micro Element Fertilizer

GUARANTEED CONTENT	%W/W
Total Nitrogen **(N)**	10
Ammonium Nitrogen **(NH_4-N)**	10
PhosphorusPentoxide **(P_2O_5)** - Watersoluble	5
Potassium Oxide **(K_2O)** - Water soluble	5
Magnesium Oxide **(MgO)** - Water soluble	3
Boron **(B)** - Water Soluble	8
Zinc **(Zn)** (EDTA chelated) – Water soluble	1
Zinc EDTA chelate stable pH range	3-7

MISCIBILITY

The product can be mixed with many known insecticides, fungicides and folia fertilizers. Do not mix with polysulphide, mineral oils and heavy alkaline compounds.

PLANT	DOSE	APPLICATION (FOLIAR)
Wheat, Barley, Rye, Oat, Rice, Triticale	1.5 kg/ha	Apply 1-3 times from tillering.
Cotton, Sugar Beet, Sunflower, Potato, Onion	2 kg/ha	From the start of leaf formation, application of 1-2 times is done
Maize, Tobacco, Rapeseed, Clover, Sainfoin, Grass	200 g/100 L	From the start of leaf formation, application of 1-2 times is done.
Tomato, Eggplant, Pepper, Cucumber, Pumpkin, Melon, Watermelon, Okra, Leek	2 kg/ha	From the start of leaf formation, application of 1-2 times isdone.
Lettuce, Celery, Broccoli, Cabbage, Cauliflower, Spinach, Cress, Arugula, Parsley, Mint, Asparagus, Hops, Radish, Artichoke, Strawberry, Lentil, Chickpea, Vetch, Pea, Broad Bean, Bean, Ornamental plants	2 kg/ha	From the start of leaf formation, application of 1-2 times is done. Re-application is done at intervals of 7-15 days depending on necessity.
Apple, Pear, Peach, Apricot, Cherry, Grape, Citrus, Apple, Hazelnut, Pistachio, Pomegranate, Olive, Fig, Banana, Avocado, Kiwi, Plum, Walnut, Rose	2 kg/ha	In all fruit plants, 1-2 applications should be made after harvest and during leaf formation.

SEAWEED EXTRACT

GUARANTEED CONTENT	%W/W
Organic Matter	48
Potassium Oxide **(K_2O)** - Watersoluble	18
Alginic Acid	5
Electric Conductivity **(EC)**	35.5% (dS/m)
pH	7.5 - 9.5

PLANT	BASE APPLICATION (g/ha)	DRIP APPLICATION (g/100 L)	APPLICATION TIME
Vegetables Greenhouse-Open field	1.5-2 kg	5-8 kg	10 days after planting and continues until 15 days before harvest.
Fruit trees	2.5-3 kg	8-10 kg	Before flowering and continues until 15 days before harvest.
Wheat, Barley, Rice Sunflower, Cotton	1.5-2.25 kg	8-10 kg	15 days before planting and after the plants have 3-5 leaves repeat application at 15-day interval.
Maize	1.75-2.25 kg	8-10 kg	15 days before planting and after the plants have 3-5 leaves repeat application at 15-day interval.
Tobacco	1.75-2.25 kg	80-10 kg	Apply right after planting and repeat at 15-day intervals.
Potato-Onion	1.75-2.25 kg	8-10 kg	Apply after the plants have 3-5 leaves and continue at 20-day interval till harvest.
Carrot, Sugar Beet	1.75-2.25 kg	8-10 kg	Apply after the plants have 3-5 leaves and continue at 20-day interval till harvest.
Green areas, Parks, Flowers and Landscapes	1.75-2.25 kg	8-10 kg	Apply through irrigation water at 15-day interval and follow with fresh clean water for at least 10 minutes afterwards.
In vineyards	3-4 kg	8-10 kg	Give during the cultivation period at an interval of 15 days. Increase (double) the dose after fruit set.
Banana	300-4 kg	8-10 kg	Give with the first fertilizer at 10 days apart. Increase (double) the dose after fruit set.
Pistachio	3-4 kg	8-10 kg	Before flowering and continues until 15 days before harvest.

Dogatech

soil analysis:

The Key to Plant Nutrition Management

Soil analysis is key to maximising Fertilizer efficiency and obtaining high yields and quality products from all kinds of crops. It thus is important to first conduct soil analysis when planning to cultivate a field. Depending on the soil properties, the crops to be grown, a fertilisation programme can be determined. Conscious and adequate fertilisation is essential for healthy cultivation. Improper Fertilizer usage brings about unnecessary increase in production cost and environmental pollution as well as reducing soil productivity over time. Our company makes appropriate Fertilizer formulations on demand for our clients based on soil and plant analysis.

declaration

The Doğatech Company guarantees the quality of the product when handled and used in accordance with the company's recommendations. The proposed doses in this catalogue were made based on soil and plant analysis from different regions across Turkiye and may not be appropriate for other geographic locations. We recommend that application is done based on soil analysis and specific crop needs. The company would not be held liable for any problems (toxication, ineffectiveness, etc.) arising from improper storage, incorrect use and/or combinations with other products.

Always read the product labels before use!!!

Doğatech

www.dogatech.com.tr

DOĞATECH ARAŞTIRMA GELIŞTIRME ANONIM ŞIRKETI

ADDRESS
İncesu OSB 4. Cad. No: 46, İncesu - Kayseri/TURKIYE

Tel & Fax No: +90 352 503 00 22
Email: info@dogatech.com.tr

MADE IN
Türkiye
Discover
the potential