





# **Nitro Metals**

# WATER SOLUBLE FERTILIZERS THAT CONTAIN METALLIC ELEMENTS OF IRON, BORON OR ZINC, WITH CONTROLLED RELEASE NITROGEN

# **NitroFER**

8-0-0+10Fe+T.E.

# **NitroZINC**

8-0-0+10Zn+T.E.

# **NitroBOR**

8-0-0+10B+T.E.

T.E.: B, Co, Cu, Fe, Mn, Mo, Zn.

- They do not create toxicities in the soil and the plant, as the sulfuric form elements do (Iron Sulfate, Borax, Magnesium Sulfate and Zinc Sulfate).
- ∀ They do not create dissoluble complexes in soil, they can not be bound or bind other elements other nutrients like their competitive ones.
- ★ They cannot be rinsed easily, as the chelate form of an element can. They are controlled release and therefore they are able to supply from the 1st day and for a long period of time the plants with the metallic elements they contain.







# **IDENTITY OF NitroMetals**

**METALS** are products of metallic compounds. Their production is based on a New Pioneer Technology and they are created especially for Agricultural usage. The metallic compounds (Iron-Fe, Zinc-Zn, Boron-B) **are rapidly assimilated and absorbed by the plants**, **simultaneously with the Nitrogen compound that these product contain.** Therefore, **METALS cover all the cultivation's needs** of the above compounds. The rest remains in the ground, in assimilable form for plants.

**METALS** gather all the Advantages of the "traditional forms" of Metallic elements, without having any of their Disadvantages.

**NitroMetals** are water-soluble granular or crystalline inorganic fertilizers of metallic elements. Iron, Boron or Zinc Metals with High-Technology Controlled Release Nitrogen for top dressing fertilization of the cultivation.

**METALS** are rapidly absorbed by plants, at the same time as Nitrogen contained in them, quickly and efficiently, covering their metal needs. The rest remain on the soil, in assimilable form for the plants.

## Controlled Release Technology (CRF)

### **ADVANTAGES**

- 1. 3 forms of Nitrogen. (Ammoniac, Nitrate, Amide)
- 2. **Prolonged action.** Action starts from the moment of application and is prolonged for a long time.
- **3. Does not get bound.** It doesn't get bound and remains available for use when needed.
- **4. It does not affect the pH.** It does not affect the pH of the soil, since it does not have an acidic effect such as nitrification of ammonia, urea, or the absorption of ammonium directly from the root system does.

#### THE WINNER IN PERFORMANCE

Controlled Release Technology® enables the farmer to plan the supply of nitrogen in the cultivation with smaller and more frequent applications, fully controlling the growth of plants with the minimum possible cost and best results.

# **APPLICATION:**

**Top Dressing** with dispersion and irrigation, by spreading it on the surface of the soil.

**With Winter Fertilization,** they can be applied before or during the application of the winter fertilizers, spreading to the ground. It is advised to incorporate it with the soil and irrigate.

# APPLICATIONS- DOSAGES OF NitroMetals

# **NitroFER**

#### **APPLICATIONS:**

It can be applied at all crops that show **nutrient deficiency of iron**, as in **soils with high pH**. During the winter fertilization apply it alone or mixed with other NPK fertilizers. At annual crops apply it before the transplanting or seeding and at tree cultivations during winter, around the tree or along the planting rows. It is advisable to incorporate and irrigate. During the **Top dressing** fertilization apply it on surface and irrigate, or can be applied by puring or by dissolving it in the irrigation water.

#### **DOSAGE:**

As a **soil improver, doses are calculated depending on** the degree of iron and the ratio deficiency of free calcium carbonate in soil.

In extremely alkaline soil cases it requires 10-20 kg/ha. or 0.5-1.0 kg/tree.

### **Usual Dosage:**

**Tree cultivations:** 300-600 g/Tree • **Vineyard:** 200-400 g/Vine • **Other Crops** 5-10 kg/1000m<sup>2</sup> In annual crops the application must be made before the establishment of the crop.

# **NitroZINC**

#### **APPLICATIONS:**

Apply at all kind of soils that have **zinc deficiency**:

⇒ Mediterranean soils, sandy, calcareous. ⇒ Organic soils, dried lakes-ponds. ⇒ Soils swamped by flooding rivers, streams or storm. ⇒ Soils acidic. ⇒ Soils generally substandard. ⇒ Soils that have suffered excessive nitrogen or phosphorus fertilization.

It is application is recommended to all cultivations that have **frequent or symptomatic zinc deficiency:** fruit, vegetables, cotton, tobacco, potatoes, beets, etc.

During the **winter fertilization**: mixed with the NPK fertilizer or soil application or under the canopy of trees. It is advisable to incorporate and irrigate. During the **Top dressing fertilization** apply it on surface and irrigate, or can be applied by injection or by dissolving it in the irrigation water.

In annual crops, the application must be made before the establishment of the crop.

#### **DOSAGE:**

As a soil improver: Depending on the deficiency apply 3-8 kg/1000m<sup>2</sup>

Corn 3-6 kg/1000m<sup>2</sup> • Cotton, Tobacco, Potatoes 2-5 pounds/1000m<sup>2</sup> • Beets, Vegetables, etc. 2-3 kg/ 1000m<sup>2</sup> • Citrus 300-600 gr/Tree • Deciduous trees, Olive trees 250-500 gr/Tree • Vineyard 200-300 gr/Vine

# **NitroBOR**

#### **APPLICATIONS:**

Apply at all kind of soils that have **boron deficiency**:

It's deficiency can be spotted during periods of drought as the top braches stop growing and the leaves show spots and burns on their tips, the fruit appear to have spots also and plants stop their growth. In order to use it as a soil improver the applications **requires** prior certification of boron deficiency via **soil analysis.** 

Apply to cultivations that usually show boron deficiency such as:

Olive tree, apple, almonds, cherries, grapes, sugar beet, corn, vegetables, cotton, tobacco, asparagus, alfalfa, etc.

#### **DOSAGE:**

As a soil improver: Depending on the deficiency 2-4 kg/1000m<sup>2</sup>

Olive: To fully grown trees from 400-600gr/tree. To young trees 20gr/tree/year of age, during autumn or spring. • Sugar beet: 3-6 kg/1000m² before the establishment of the crop. • Apple: To trees under 15 years old, 250gr/tree and trees over 20 years 300-600gr/tree during spring. • Pear: The grown trees more than 3-4 years from 300-600gr/tree during spring. • Vineyard: From 3-5 kg/1000m² during spring. • Vegetables: 2-4 kg/1000m² before the establishment of the crop. • Cotton: From 1-2 kg/1000m² before the establishment of the crop. • Tobacco: From 1-2 kg/1000m² before the establishment of the crop. • Alfalfa: 2-6 kg/1000m² during fall or spring.

Note: Because the range between the toxicity and lack of boron to plants is narrow, care must be taken not to exceed the above dosages.