

**SIAPOR®**

**CHALLENGE S®**

**ORGANO-MINERAL FERTILIZER  
NPK (Mg-S) 5-12-12 (2-10) with Zinc (Zn)  
LOW LEVELS OF CHLORINE**

LARGE AMOUNT  
OF  
HUMIFIED ORGANIC CARBON  
(HUMIC AND FULVIC CARBON)

An innovative NPK organo-mineral fertilizer, suitable on extensive crops such as **wheat, corn, sugar beet**, in soils with low potassium level; it is also advisable to meet the prevailing needs of phosphorus and potassium especially for those **vegetables** requiring the two elements in a balanced ratio.

The product is particularly suitable in young plants nursery: **vineyard, fruit trees, citrus**, etc., to foster the freeing of the root system and to speed up the start in the early stages of the cycle of **herbaceous crops**.

NPK, S, Mg and Zn nutritional units, while reacting with the humic part of the organic matter (dried manure, dried poultry manure, humic peat) acquire a significant degree of protection, thus allowing optimal crop yield.

**This allows:**

- **high and extended nutrient availability** for the entire crop cycle;
- **reduction of losses** due to insolubility, leaching and evaporation;
- **flexibility to the fertilizing cycle** with the option of applying it before the normal period of nutritional use;
- **saving of fertilizer usage.**

The addition of meso and micro-elements can raise important physiological processes:

- **SULFUR** (SO<sub>3</sub> 10%) contributes by feeding the plant with a better amino acid metabolism on a cellular level.
- **MAGNESIUM** optimizes the photosynthetic cycle and the phosphate metabolism.
- **ZINC** is an active element in many enzyme systems: it encourages the auxin growth, directly affects the nitrogen metabolism and the phosphorus uptake, beneficially fostering crop growth in the early vegetative stages.



- **Packaging:** 25-500 Kg
- **Shape:** Minipellets
- **NPK ratio:** 1 : 2,4 : 2,4

Manufactured by



**Unimer S.p.A.**

Via Paleocapa, 7 - 20121 Milano

Approval Number:  
Plant of Vidor:  
ABP1193UFERT2  
Plant of Arquata del Tronto:  
ABP1177UFERT2

COMPANY WITH  
SYSTEM CERTIFIED  
BY DNV • ISO 9001

# SIAPOR® CHALLENGE S®



## ORGANO-MINERAL FERTILIZER NPK (Mg-S) 5-12-12 (2-10) with Zinc (Zn) LOW LEVELS OF CHLORINE

COMPOSITION	
N total	5%
N organic	1,2%
N ammoniacal	3,8%
P <sub>2</sub> O <sub>5</sub> total	12%
P <sub>2</sub> O <sub>5</sub> neutral amm. citrate and water soluble	8%
P <sub>2</sub> O <sub>5</sub> water soluble	5%
K <sub>2</sub> O water soluble	12%
MgO total	2%
SO <sub>3</sub> water soluble	10%
Zn total	0,01%
Organic Carbon (C)	14%
Humic and fulvic Carbon (C)	3,5%

- **Mineral fertilizers:** NP 18-46 (diammonium phosphate), triple superphosphate, potassium sulphate, phosphatic scraps, potassic scraps.
- **Organic components:** Dried cattle and horse manure, dried poultry manure, humified peat, green composted soil conditioner.

DOSES BY CROP		
CROP	DOSE Kg/ha	USE
Horticultural	600-800	During the last pre-sawing/transplanting operations
Melon, watermelon and cucurbits	600-1000	During the last pre-sawing/transplanting operations

Fruit trees	600-800	At the end of the harvest and/or end of winter
Strawberry	600-800	Pre-transplanting
Viticulture and olive trees	500-700	At the end of the harvest and/or end of winter
Corn and sorghum	500-600	During the last pre-sawing operations
Industrial, oil and protein crops	400-700	During the last pre-sawing operations
Wheat, rice and other cereals	400-600	During the last pre-sawing operations
Beetroot and alfalfa	500-600	During the last pre-sawing operations
Tobacco	600-800	During the last pre-transplanting operations
Flower and ornamental crops and recreational lawns	500-800	At vegetative revival or pre-transplanting

Reference guidelines for individual crops are purely illustrative and are changeable, in relation to the needs, the fertility levels and the provisions of various regulations.

For organic and organo-mineral fertilizers it is recommended to place the product slightly underground to enhance the nutritional efficacy.