



Agriculture



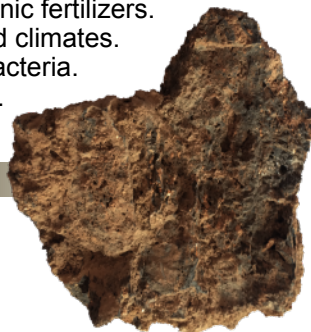
Description

**Commercial name:** RP - Phosphate Rock  
**Active Ingredient:** Phosphorite  
**Formula:**  $Ca_5(PO_4)_3(F,Cl,OH)$

The phosphate rock is the main source of phosphorus essential for all fertilizers manufacture. It can be applied alone directly into the soil, or mixed with other fertilizers and - with an appropriate handling - the results are at least the same than when using a chemical or synthetic fertilizer; nevertheless, at much lower costs.

Benefits

- Boosts the plant growth during both the vegetative and the reproductive state.
- Enhances the fruits quality and a more uniform ripening.
- It's ideal for all type of crops, since it contains micronutrients that complete the nutrition.
- It is completely natural, thus being environmentally friendly.
- It's compatible with chemical and organic fertilizers.
- It can be applied in all type of soils and climates.
- Does not pose a threat to beneficial bacteria.
- It does not salinize nor erode the soils.
- It's a slow release nutrition source.



Composition

ELEMENT	%
Carbon (C) .....	4.63
Nitrogen (N) .....	3.55
Phosphorus ( $P_2O_5$ ) .....	31.073
Calcium (CaO) .....	43.16
Silicon ( $SiO_2$ ) .....	10.005
Aluminium ( $Al_2O_3$ ) .....	3.283
Iron (FeO) .....	0.961
Sodium ( $Na_2O$ ) .....	0.507
Magnesium (MgO) .....	0.043
Potassium ( $K_2O$ ) .....	0.061
Sulfur ( $SO_3$ ) .....	0.08
Manganese (MnO) .....	0.036
Zinc (Zn) .....	53 ppm



Physical properties

Color: Dark brown to ochre.  
 Density: 3.12 gr/cm<sup>3</sup>.  
 Solubility: INSOLUBLE (>0,01%).  
 Melting point: 1,400°C.  
 Hardness: 5 Moh's.  
 pH: 7.25

Recommendations

It is suggested an annual application directly into the first centimeters of soil, preferably before sowing or planting, or the closest to the roots. It can be used with other chemical or organic fertilizers in order to achieve optimal results. Using acids (ascetic, sulfuric, nitric) in the irrigation system when applying phosphate rock into soils is highly recommendable in order to degrade it faster. When replacing chemical nutrition, it is strongly advised to do it gradually.

Grains, legumes and tubers .....	200 - 300 kg/Ha
Vegetables .....	150 - 470 kg /Ha
Pastures .....	350 - 400 kg/Ha
Sugar cane .....	250 kg/Ha
Rice and sunflower .....	60 kg/Ha
Banana (plantation) .....	6 kg/plant
Fruit trees .....	500 - 2,000 gr/plant

Dosage can vary depending - besides on the soils structure - on the content of existing nutrients, as well as the soil pH and CEC (Cation Exchange Capacity), thus an inappropriate pH or high contents of certain elements interfere with the intake of others, creating deficiencies which lead to low production and poor quality; using soil analysis as a guideline is highly advised.

DO NOT to exceed the recommended dosage.

Presentation

Available mesh:

- RP-006: mesh 4X8 (sizes from 2.5 to 5mm)
- RP-018: mesh 10x30 (sizes 0.8 to 2.5 mm)
- RP-100: mesh 30x100 (0.1 to 0.8 mm - powder)
- RP-325: mesh 325x600 (smaller than 0.05 mm)

**Package:** polypropylene 50 kg sack.

Precautions

This product is NOT food grade; it is not suggested to ingest. Since it can cause skin dryness and powder lungs, it is recommended to employ special safety equipment for handling: overall and gloves, respirator and goggles. It is NOT corrosive nor toxic, although it is volatile. In case of eye or skin contact, wash with abundant water. Keep away from the sun light and moisture, preferably on pallets. Dispose the package in an appropriate place, ensuring to not pollute the closest water bodies.