

# Copper Sulphate



EC Fertilizer - Copper Sulphate



## COMPOSITION

Copper (Cu) soluble in water 25%  
 Raw materials: Copper Salt (Sulfate)

**Appearance**  
Granules / Powder

**Application**  
Foliar

**Packaging**  
10 Kg

## DESCRIPTION

SKL Copper Sulphate is a fertilizer based on Copper oxchloride.

Copper is an essential micro-nutrient for plants and animals health.

Copper deficiency in the soil causes the reduction of quantity and quality of the harvest.

Rice and Wheat, most cultivated cereals in the world, are very sensitive to this deficiency, but it's also dangerous for Citrus, Oats, Spinach, etc.

The most effective strategy is to give Copper salts to soil.

Copper is involved in many enzymatic processes, and any other ion can't replace it. It's essential in carbohydrates and Nitrogen metabolism, in the development of cell walls and in oxidative reactions.

Copper also influences the chemical composition and synthesis of Lignin, essential molecule for the mechanical resistance of shoots, increasing plant defensive mechanisms.

## DOSES AND METHOD OF USE (as fertilizer)

Crops	Doses	Application
Tree crops and grapevine	200 - 500 g/hl	in 500 - 1000 lt of water
Olive tree	200 - 500 g/hl	in 500 - 1000 lt of water
Strawberry and horticultural crops (also Fennel)	200 - 500 g/hl	in 500 - 1000 lt of water
Open field crops	200 - 500 g/hl	in 500 - 1000 lt of water

## BORDEAUX MIXTURE

In agriculture Copper Sulphate is mixed with Calce Fiocco SKL to prepare **Bordeaux Mixture** on your own.

Preparing Bordeaux Mixture with Copper Sulphate and Lime, allows to make a perfect formulation, according to personal needs.

Classical preparation of **Bordeaux Mixture** consists in:

Every 100 Lt of water	
<b>Copper Sulphate</b>	<b>Calce fiocco SKL</b>
2 kg (20 g per liter of water)	1,3 kg (13 g per liter of water)

The dose of Calce Fiocco SKL may be changed, in order to prepare:

- the **Acid mixture** (with less content of Lime) has a strong and rapid fungicide action (both for plant and fungal pathogens), so it's mainly used in case of severe infection.
- the **Neutral mixture** (standard dose) has a



moderate fungicide action, so it's mainly used in average infection cases or for preventive applications.

- the **Alkaline mixture** (with a high content of Lime) has a slow but longer fungicide action, so it's mainly used for preventive applications, able to protect the plant for a long period from expected infections.

## METHOD OF PREPARATION

Pour in the barrel sprayer the dose of Copper Sulphate Neve or Granitiello, using a water jet to dissolve it quickly; in a different container dissolve, in a small amount of water, a quantity of Calce fiocco SKL as:



- About 50 % compared to Copper Sulphate (e.g. with 10 kg of Copper Sulphate use 5 kg of Calce Fiocco SKL) in order to obtain the **Neutral Mixture** (test with the litmus paper the colour yellow/green);
- About 30 % compared to Copper Sulphate (e.g. with 10 kg of Copper Sulphate use 3 kg or less of Calce Fiocco SKL) in order to obtain the **Acid Mixture** (test with the litmus paper the colour orange/red);
- About 70 % compared to Copper Sulphate (e.g. with 10 kg of Copper Sulphate use 7 kg or more of Calce Fiocco SKL) in order to prepare **Alkaline Mixture** (test with the litmus paper the colour azure/blue).

The Lime Milk obtained have to be poured out inside the barrel sprayer where is already contained the Copper Sulphate solution. The Mixing rapidity is essential for the size of particles.

If the purpose is to prepare the Neutral Mixture, test with the litmus paper if the mixture is neutralized: when the litmus paper turns yellow/green, the mixture is ready to be sprayed.

## **DOSES AND METHOD OF USE** (as poltiglia)

Crops	Doses	Time of application
Grapevine	0,5 - 1%	before flowering
	1 - 1,5%	after flowering
Olive tree	1 - 1,5%	when vegetation restart
	1%	at fruit set
Apple, Pear	1 - 1,5%	when the leaves fall
	0,5 - 1%	from buds swelling to emerging flower clusters
	0,3%	from fruit set to early leaf fall
Cherry, Peach, Plum, Almond	1,5 - 2%	from the leaves fall and before the enlargement of the buds
Ornamental plants	1 - 1,5%	

**Pre harvest interval: 20 giorni**

## **WARNINGS**

We suggest to use the mixture during the same day of the preparation, in order to have a complete antifungal activity.

One of the most common problem during the preparation is represented by the flocculation and the low mixture stability.

The mixture can easily precipitate, so it's necessary an appropriate shacking.

To increase solubility is possible to reverse the procedure, so dissolve Copper in a small amount of warm water, dissolve the Lime and then add the Copper solution, but pratically this is a less comfortable way to operate.



Product included among those provided by reg. CEE 2092/91 and following updates for organic farming use.