



**KOBE SC®**



*Kobe SC® – A Novel Bio-  
Fungicide / Bactericide / Viricide for  
successful Crop Protection*

**Sineria**



Kobe SC® is a highly bio-active plant-derived biopesticide newly developed by Sineria Holland BV of the Netherlands.

The key active ingredients in Kobe SC® are natural substances extracted by a unique extraction process from the herbal plant *Rheum officinale* Baill and a patent protected isolation method from the roots of the plant *Rumex crispus*.

Kobe SC® inhibits the metabolism of fungi cells and thereby prevents the growth of the mycelia (fungal cells) on the subsurface of the plant. Kobe SC® also limits the growth of conidia (mitospores).

Kobe SC® provides excellent and effective protection against powdery mildew, gray mold and various other diseases, on a wide range of crops; among them vegetables, ornamentals, and cereals. It also offers a reliable solution against downy mildew, alternaria, and anthracnose.

As a low toxicity product to humans and livestock, it is friendly to the environment and can be used in vegetable production. It is recommended to use Kobe SC® before or upon the first sign of infection of the disease.

### *Mode of action*

Kobe SC® has a unique fold mode of actions. Kobe SC® activates the plant immunity by eliciting the Systemic Acquired Resistance (SAR) of the attacked

plant and by inducing systemic resistance mode of action, which causes plants to arm their own defense systems against attacking pathogens. One of the more effective resistance self immunity mechanism is manipulating the plant to regenerate phytoalexins that prevent spores and fungus from penetrating the plant.

Crops treated with Kobe SC® produce and accumulate high ratio of self generated proteins, phytoalexins and other compounds known to inhibit fungal and bacterial diseases and effectively stop the disease or infection from migrating to neighboring cells.

When a crop is treated with Kobe SC®, its natural defence system is "activated" to protect itself against attacking diseases.

KOBE SC® was also found to inhibit sporulation by biosynthesis of existing hostile cells. It has a good preventative, moderate curative and eradicated action due to the rapid translocation of *Rheum officinale* Baill plant extract in the plant.

KOBE SC® also works as an eradicator by fencing fungal haustoria, which are cut off from their nutrient supply and therefore die. The key active ingredients of KOBE SC®, *Rheum officinale* Baill, can be produced from various plants as well as several fungi, among them *Aspergillus* spp. and *Penicillium* spp. Both are known to have anti-tumor activity, strong antioxidant and anti-mutagenic activity.

## KOBE SC® Characteristics

- A new botanical extract with a unique mode of action.
- Attacks the fungus at different target sites in their metabolic pathways.
- Low MRL (Maximum Residue Level) index.
- Highly effective against powdery mildew as well as downy mildew, gray mold, and anthracnose.
- Compatible with other pesticides.
- Unique mode of action as a translaminar acquired resistance elicitor and a low cross-resistance with other types of fungicides.
- Observed to be safe to *Phytoseiulus persimilis*, honey bees, livestock, and the environment.
- An excellent IPM program compliance product.
- OMRI-listed for use in Organic Agriculture

## Known Toxicological profile

	Acute oral toxicity to rat (LD <sub>50</sub> mg/ka)	Acute dermal toxicity to rabbit (LD <sub>50</sub> mg/ka)
Technical active ingredient	>5000	>2000
KOBE SC®	>5000	>2000

## Rates of application:

Recommended general application rate: 100 ml per 50-60 L of water.

Crop	Target Diseases	Application Rate	Remarks
Roses and Vegetables	Powdery mildew	<b>1.5-2 liters in 1000 liters of water</b>	<b>The higher rate should be used in case of actual presence of powdery mildew in the yield</b>
	Gray mold and downy mildew	<b>1.5-2 liters in 1000 liters of water</b>	
	Agrobacterium, <i>Pseudomonas sp.</i> , <i>Xanthomonas sp.</i> , Viral diseases	<b>2.0 – 4.0 liters/ Ha</b>	<b>Apply protectively either as a foliar spray or through fertigation on monthly basis for Roses, or make a minimum of 2 weekly applications for vegetables.</b>

The rates given are reference rates only. When using the product, always test a small area first before commencing commercial use.

## Application

Apply evenly and thoroughly prior to the appearance of diseases or when a disease first appears. Repeat at 10 day intervals as necessary.

## User Precautions

- KOBE SC® is a protective bio-pesticide. It is preferably applied prior to the appearance of the disease or upon the first symptoms. Good control of the disease is less effective when applied at a later stage.
- KOBE SC® is non-systemic. Even and thoroughly spraying is necessary to obtain the anticipated protective effects.
- KOBE SC® residual activity lasts approximately 10 days. Repeated applications are required to protect crops from disease infection during the entire growing season.
- Even though KOBE SC® is of low toxicity to humans and livestock, applicators and other handlers must take protective measures when they apply the fungicide as stipulated in the requirements of pesticides regulations.
- Store unused product in original containers only, in cool, dry area, out of reach of children and animals. Do not contaminate water, food, and feed by storage and disposal.







## About Sineria Holland BV

At the heart of Sineria Holland BV, is our core belief in investing in the future, through improved food quality and safety. To achieve this, a sustainable agricultural development is necessary by saving natural resources from decay and genetic variety.

Sineria Holland BV is all about supporting the farmers, contributing to a healthy environment by providing effective and sustainable products. We apply strict quality parameters to ensure sound and wholesome working surroundings, while simultaneously invest, develop and market environmental-friendly agricultural solutions, enabling the production of healthy food which meet the demands and requirements of most rigorous markets.

Sineria Holland BV has gained the trust of the horticultural and agricultural producers from Holland and other countries, and advises public and private forums.

## International Presence

Sineria Holland BV's main activity is focussed on Europe, the Mediterranean, Middle East and Africa. We are operating today already in ten countries and more countries are becoming aware of Sineria Holland BV's high quality products as well as of our indepth knowledge regarding the application of minimum residue crop protocols. The growing international demand is encouraging us to increase our presence in export markets, which is currently our largest area of expansion.

Sineria Holland BV's effort in meeting the growers' needs in countries where we operate, is constantly increasing. We take special care in training local technicians, carrying out specific studies, adapted to geographic conditions, improving local product distribution networks, and more. Our work philosophy, knowledge and experience, are demonstrated and present in major international events worldwide.

### Important Note:

The Indicated Crops and Recommended Rate of application on this Product informative sheet may not be applicable in country where the product is intended to be used. User must refer and use the product only as per the officially Register and approved uses by the ministry of Agriculture authorized authorities. The supplier cannot be held responsible or liable if the use of this product is preform on Crops which are not listed on the official label as approved the ministry of Agriculture authorized authorities.

### Disclaimer

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[WWW.KOBE12SL.COM](http://WWW.KOBE12SL.COM)

**Sineria**

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