



## SICO®-KMS

**Natural Potassium(K) Magnesium(M) Sulphate(S)**

**25% K<sub>2</sub>O + 7% Mg (= 11.6% MgO) + 16% S**

Available as granular chips and as powder, suitable for organic agriculture

For chloride and salt-sensitive crops

Origin: China

01/2021

### **1. PRODUCT SPECIFICATIONS/CERTIFICATE OF ANALYSIS**

#### **\*PHYSICAL PROPERTIES**

- granular chips: size 2-5 mm: min. 90%
- or - powder: size 120-200 mesh: min. 90%



**SICO KMS (granular chips)**

**SICO KMS (powder)**

#### **\*CHEMICAL ANALYSIS & GUARANTEED VALUES**

<b>Parameter</b>	<b>GRANULAR CHIPS</b>	<b>POWDER</b>
Potassium Oxide (K <sub>2</sub> O)	Min. 25% (typical 25-26 %)	Min. 25% (typical 26-28 %)
Sulphur (S)	Min. 16-17%	Min. 16-17%
Natrium (Na)	Max. 0.7%	Max. 0.7%
Chloride (Cl)	Max. 0.5%	Max. 1.5%
Magnesium (Mg)	Min. 7% (= 11.6% MgO)	Min. 7% (= 11.6% MgO)
Phosphorus Pentoxide (P <sub>2</sub> O <sub>5</sub> )	Max. 1%	Max. 1%
Calcium (Ca)	Max. 0.2%	Max. 0.2%
Insolubles	Max. 0.05%	Max. 1%

Heavy metals: Pb/As/Cd = lower than 10 ppm

Cr: not found

### **2. APPLICATION**

\* SICO®-KMS is a highly concentrated fertiliser containing the 3 nutrients potassium, magnesium and sulphur, all in the sulphate form.

All 3 nutrients are readily water soluble and immediately available to plants.

\* SICO®-KMS has a low salt index and is virtually chloride-free. It is thus an ideal K, Mg and S source for chloride and salt-sensitive crops such as fruits, vegetables, grape-vines, hops, potatoes, sunflowers and forest trees.



**PRODUCT INFO  
& DATASHEET**

- \* SICO®-KMS is effective on all soil types, irrespective of pH.
- \* SICO®-KMS is cleared for use in organic farming systems as potassium, magnesium and sulphur are derived from naturally occurring salt deposits.
- \* SICO®-KMS contains potassium, magnesium and sulphur in an ideally balanced ratio for plant growth and development. This is of particular importance in crops with a specific demand for sulphur (oil crops, cabbage, onion, leek) or magnesium (potatoes, legumes).
- \* SICO®-KMS is the ideal potassium and magnesium source for chloride or salt sensitive crops such as tobacco, potato, fruits, vegetables, grapes, ornamentals etc.
- \* SICO®-KMS is a well-established potassium and magnesium fertiliser in nurseries and forestry.

**Fertilisation advice**

Crop	kg SICO®-KMS /ha
Potatoes	600 - 1,200
Cabbage & carrots	800 - 1,200
Fruit	400 - 600
Berries	600 - 800
Flower bulbs	500 - 1,000
Vegetables (full soil)	600 - 800

**At what time to apply SICO®-KMS?**

- \* SICO®-KMS may be applied up to just before sowing or planting, because of the low salt index, even in draught periods.
- \* It is recommended to apply SICO®-KMS in light soils especially in spring time.
- \* When a Kali (potassium) deficiency has been observed, one may apply SICO®-KMS as Kali (potassium) fertilisation (because low chloride fertiliser) also during the growth period of the crop on condition sufficient soil humidity is present.

**For what crops?**

- \* For Kali (potassium) fertilisation of all chloride-sensitive crops (see table 1) SICO®-KMS is the ideal fertiliser.

Table 1: Chloride-sensitive crops:

- |                |                     |
|----------------|---------------------|
| - peas         | - berries           |
| - raspberries  | - cherries          |
| - strawberries | - ornamental plants |
| - conifers     | - beans             |
| - blackberries | - flowers           |

- \* For limited chloride-sensitive crops with relatively high risk for salt damage (see table 2), SICO®-KMS is to be used, certainly on the lighter soil types, to provide Kali (potassium).

Table 2: Limited chloride-sensitive crops with relatively high risk for salt damage

- |                                 |                |
|---------------------------------|----------------|
| - factory potatoes              | - flower bulbs |
| - tree nurseries                | - onions       |
| - seed and consumption potatoes | - fruit trees  |
| - nearly all vegetables         |                |
| - flax                          |                |

- \* In fruit and vegetable cultures, next to the fact that many vegetable crops are chloride-sensitive, SICO®-KMS is required to reach the highest quality.

- \* In potato cultures, SICO®-KMS assures less blue-sensitiveness and better conservation during storage. Consumption potatoes fertilised with SICO®-KMS taste better. In cultures of factory potatoes, fertilisation with SICO®-KMS instead of chloride-holding Kali, increases the starch yield and the underwater weight - thus the payable weight - is improved.

**3. PACKING**

25 kg laminated pp + pe bags, 1000 kg pallets, 20 MT/20' container for powder and about 22 MT/20ft for granular.