



SICO-SOLSOP

**Superior soluble sulphate of potash (SOP) horticultural grade min.
51% K₂O + min. 17.5% S (white & free flowing)
for fertigation and foliar application and high quality crops
- EC fertiliser -**

updated 11/2016

1. TECHNICAL CHARACTERISTICS

SICO-SOLSOP is a fine white free flowing powder and is completely soluble and fast dissolving high quality SOP.

Application advice: First dissolve SICO-SOLSOP in a tank at least two thirds filled with water. Continuous stirring, combined with use of tepid water will speed up the dissolution of SICO-SOLSOP considerably. The dissolution time depends on water quality and stirring technique used. We recommend to first prepare a trial mixture to check compatibility prior to large scale use.

A. Chemical analysis

	<u>Typical %</u>	<u>Guaranteed %</u>	<u>Method of analysis</u>
K ₂ O	51.5 - 52.6	min. 51	XRF
Cl	0.66	max. 1	XRF
SO ₃	45.6 - 46.6		XRF
S	18.2 - 18.6	min. 17.5	XRF
Na	0.30	max. 1.0	XRF
Moisture as H ₂ O	<0.05		Gravimetric
Ca	<0.1		XRF
Mg	0.01		XRF
Fe	0.003		XRF
Insoluble matter	<0.003	max. 0.05	Gravimetric
pH	2.8		1% solution 5 minutes
Solubility	115 g/L		VK 20° C H ₂ O
Salinity Index	43 - 46		

B. Particle size distribution (Gravimetric sieve analysis)

<u>Sieve mm</u>	<u>Typical % through</u>	<u>Method of analysis</u>
0.5	98	Sieve
0.3	90	Sieve
0.2	69	Sieve
0.09	16	Sieve

C. Typical physical properties:

Bulk density - loose	1,280 g/l	Gravimetric
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D. Quality

SICO-SOLSOP is manufactured in compliance with EU regulation (EC) No. 2003/2003. The product is white and free flowing.

The production, sales and development of potassium sulphate is within the scope of the ISO 9001:2000 certified Quality Management System. The plant also has the ISO 14001:2004 certified Environmental Management System and the 18001:2008 certified Working Environment Management System.

2. SICO-SOLSOP as a foliar spray application

- * Prevents or cures potassium deficiency
- * Improves the quality and flavour of vegetables and fruits
- * Improves crop yields, appearance and color, durability & suitability of fruit and vegetables for processing.
- * High value crops through enhanced nutritional value: SICO-SOLSOP increases the plant's production of vitamins, sugar & starch
- * Enhances resistance to crop diseases and to bruising avoiding the problems of exclusive nitrate supply in water sources, fruit and vegetables, which can have a detrimental effect on fruit quality.
- * By lowering the pH solution, SICO-SOLSOP improves availability to the plant of P, Fe and many other micronutrients.



**PRODUCT INFO
& DATASHEET**

- * Has by far the lowest salt index compared with MOP and NOP. Salinity reduces water quality in arid and semi-arid regions and destroys valuable agricultural land.
- * Caution: When used by foliar spraying, avoid the hottest hours of the day: apply during the evening or early in the morning.
- * Dosage: 2 to 4% SICO-SOLSOP in min. 200 l/ha, in repeated applications.

3. SICO-SOLSOP for fertigation and drip

- * Many benefits over other potassium sources
- * Contains 50-52.5% K₂O and 18% Sulphur (as sulphate) in readily available form for maximum uptake. Increasing sulphur deficiency in some soils is a growing problem due to intensive cropping combined with limited sulphur replacement.
- * Is ideal for chloride sensitive crops as contains virtually no chloride. Chloride increases soil salinity significantly.
- * Is a nitrogen-free potassium source, allowing growers to apply crop adapted fertiliser programs.
- * Dosage: 0.3 to 2.0 g SICO-SOLSOP per litre of nutritional solution.

4. Method of use

- * Fill the tank with $\frac{3}{4}$ of water
- * Pour SICO-SOLSOP whilst stirring
- * Complete filling of the tank with water
- * Do not exceed 10 kg SICO-SOLSOP per 100 litres of water
- * Never mix SICO-SOLSOP and calcium holding fertilisers in the same tank

5. Compatibility

Compatible with most other fertilisers within normal concentration ranges except those containing calcium (causes precipitation). Also compatible with most pesticides for foliar application. We recommend the jar test in case of doubt.

6. Packing

in 25 kg beautiful full color (10 languages) pe bags on shrink filmed pallets of 1225 kgs, 24.5 MT/20ft container.

7. Storage

SICO-SOLSOP should be stored in dry surroundings and not in direct sunlight. The product is stable at least two years when stored in bags, dry and out of direct sunlight.

8. Safe handling

The handling of any chemical requires care.

Anyone responsible for using or handling SICO-SOLSOP should familiarise themselves with the full safety precautions outlined in our MSDS.

SAP INTERNATIONAL CORPORATION BVBA makes this information available as an accommodation to its customers and it is intended to be solely a guide in customer's evaluation of the products. You must test our products, to determine if they are suitable for your intended use and must also instruct employees, agents, contractors, customers or any third party which may be exposed to the products about all applicable precautions. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. You assume full liability and responsibility for compliance with all information and precautions, and with all laws and statutes, ordinances and regulations of any governmental authority applicable to the processing, transportation, delivery, unloading, discharge, storage, handling, sale and use of each product. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use.



SICO-SOLSOP

Superior soluble sulphate of potash (SOP) horticultural grade
for fertigation and foliar application and high quality crops
- **Some further recommendations for use & dosing instructions** -

1. INTRODUCTION

SICO-SOLSOP is a superior soluble horticultural grade SOP and is fully water soluble, and therefore immediately plant-available product. It comes in the form of white crystals and is free of Chloride, Sodium and heavy metals. It is a highly efficient source of Potassium and Sulphur for arable and horticultural crops.

We recommend SICO-SOLSOP where high rates of Potassium are required e.g. for prevention and correction of Potassium deficiencies and for the normal development of crops with high requirement of Potassium (e.g. banana, potato, tomato, apple, citrus species, pepper, rose and sugar beet etc.)

Potassium Sulphate is Nitrogen-free which is advantageous for application at advanced stages of fruit development of fruit trees or vegetables and for situations of increased disease sensitivity.

2. DOSING INSTRUCTIONS

a) Foliar applications

Crop	Application rate in kg/ha/application	Application rate in % w/v	Application date
- Carrot, bulb onion - Rape, turnip	3 – 5 5 – 8	2.0 – 3.0 2.5 – 3.5	3 applications, from 4 weeks after germination, at ~10-15 days intervals.
- Deciduous fruit trees - Olive trees/citrus - Table grapes (adult)	7 – 10 9 – 12 7 – 10	2.8 – 3.5 3.0 – 4.0 2.0 – 3.0	2 – 5 applications, starting after fruit-set, at 14-21 days intervals.
Fruit vegetables	5 – 8	1.0 – 1.5	1 – 3 applications, at ~14-days intervals, during vegetative growth and after flowering.
Leaf vegetables, e.g. celery	5 – 8	1.0 – 1.2	3 applications, from 4 weeks after transplanting, at ~10-15 days intervals during vegetative growth.
Oil-seed rape	3 – 6	1.0 – 1.5	1-2 applications, during vegetative growth until flowering.
Potato, sweet-potato	4 – 6	2.5 – 3.2	3 applications, from 3 weeks after transplanting, at ~10-15 days intervals.
Sugar beet	5 – 8	3.0 – 5.0	2-3 applications, during root bulking.

b) Fertigation

Crop	Application rate in kg/ha/year	Application date
Asparagus	190 – 330	Throughout the growth season.
Banana & plantain	300 – 500	At plantation establishment, throughout the irrigation season.
- Deciduous fruit trees (bearing) - Olive trees/citrus (bearing)	150 – 350 200 – 400	Start after fruit-set, continue throughout the irrigation season until 3-4 weeks prior to harvest.
Pistachio	170 – 300	Throughout vegetative growth season: ~1/3 of annual rate during fruit development.
Processing potatoes	100 – 200	From tuber initiation until mid-tuber-bulking.
Processing potatoes	150 – 300	Start at 4 weeks until fruit maturation.
Vegetables (fruit bearing)	100 – 300	From early vegetative growth until 3-4 weeks prior to harvest.
Vineyard (bearing table grapes)	100 – 250	From initiation of spring bud opening, continue throughout the irrigation season until 3-4 weeks prior to harvest.

If irrigation water has pH > 8, it is recommended to acidify the water before adding SICO-SOLSOP for faster dissolution.

In light textured soils, apply more frequently with smaller doses. High CEC soils (clay) require less frequent applications, compensated by higher doses. SICO-SOLSOP is compatible with most used fertilisers, except calcium fertilisers.

Therefore the usage of a separate tank is needed or fertilisers should be applied at different times.

It is compatible with pesticides, though it is advisable to confirm compatibility of your intended spray-mix by preparing a sample of the spray materials at their recommended concentrations in order to rule out the possibility of a detrimental cross reaction.

This mixture should be sprayed onto small area prior to commercial treatment, in order to assess whether an adverse effect occurs.

The mentioned indicated dosages and application stages are subject to soil and climatic conditions, influence of previous crops and other specific conditions. Exact dosage and application stages can only be given after an objective diagnostic procedure by e.g. soil, substrate and/or plant analyses by your local agronomist.