

# HELIOSOUFRE® S

Biocontrol fungicide



Suitable for use in Organic Farming according to regulations (EU) n° 2018/848 and n° 2021/1165 ECOCERT inspection F-32600



## FIRST AID MEASURES

### GENERAL ADVICE

**In case of inhalation:** remove victim to fresh air. Keep the victim at rest and keep the victim warm. If the symptoms persist, consult a doctor.

**In case of skin contact:** wash with plenty of water and soap. If the problems persist, consult a doctor.

**In case of contact with eyes:** rinse immediately with plenty of water, including under the eyelids, for at least 15 minutes. If irritation develops and persists, consult a doctor.

**In case of ingestion:** DO NOT induce vomiting. Call a doctor or a poison control centre immediately. Rinse out the mouth.

HELIOSOUFRE® S is a biocontrol fungicide based on sulphur and terpene derivatives. HELIOSOUFRE® S can be used in organic farming to control septoria in wheat and powdery mildew in field crops, vines, fruit, vegetables, and ornamentals.

## CHARACTERISTICS

Thanks to its liquid formulation based on terpene derivatives, HELIOSOUFRE® S is effective and persistent. It improves the quality of application of the spray mixture as well as the mixtures. HELIOSOUFRE® S can be used alone or in mixtures in both conventional and organic farming. HELIOSOUFRE® S can also be integrated into strategies against resistance thanks to its natural multi-site substance. It can be used at low doses and provides less sulphur per hectare than reference sulphur-based products.

- The combination of sulphur and Pine Terpene Technology
- Multi-site contact fungicide
- Anti-sporulation effect
- Optimised formulation for better spray quality

## ADVICE FOR USE AND APPLICATION

### CONDITIONS OF APPLICATION

In case of spraying in field crops, use water volumes  $\geq 50$  L/ha with a pressure  $> 1.5$  bar. Observe the uses, doses, conditions and precautions for use mentioned on the packaging.

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## PREPARATION OF THE SPRAY MIXTURE

Shake the preparation well before use. Fill the spray tank  $\frac{3}{4}$  full of water. First pour the quantity of HELIOSOUFRE® S into the tank while stirring. Then pour in the other plant protection products while stirring. Then finish filling the tank with water to the required volume while maintaining agitation.

## EXTEMPORANEOUS MIXTURES AND COMPATIBILITIES

When put in the tank first, HELIOSOUFRE® S is compatible with most plant protection products. For possible combinations with plant protection products and foliar fertilisers, contact the ACTION PIN technical department. Extemporaneous mixtures must be applied in accordance with the regulations in force. Carry out a compatibility test prior to any new mixture.

Do not mix HELIOSOUFRE® S with oils or any other adjuvant.

## SPRAYER CLEANING AND TANK BOTTOM MANAGEMENT

Before each application, clean thoroughly to ensure that no residues of the previous preparation remain. At the end of each application of the product, the entire apparatus (tank, oar, circuit, nozzles, etc.) must be rinsed with clean water and using a suitable cleaning product. The rinsing of the sprayer, the spreading or emptying of the tank bottom and the disposal of effluents must be carried out in accordance with the regulations in force.

## DISPOSAL OF THE PRODUCT AND PACKAGING

When using the product, empty and rinse the can well with clear water (manual rinsing 3 times by shaking the can filled to 1/3 or mechanical rinsing for a minimum of 30 seconds), taking care to pour the rinsing water into the sprayer tank. Bring the opened, rinsed and drained packaging to your ADIVALOR partner distributor or use a company authorised to collect and dispose of hazardous waste.

For the disposal of unused products, keep the product in its original packaging. Ask your distributor partner of ADIVALOR or call upon a company authorized for the collection and the elimination of the dangerous waste.

## USAGE TABLE

REFERENCE CULTURE	CULTURES	TARGET	MAXIMUM USE LEVEL	MAXIMUM NUMBER OF APPLICATIONS PER YEAR	
Vine	Vine	Oidium	7,5 L/ha	12	
	Vine	Erinose	7,5 L/ha	4	
Field crops	Wheat (wheat, triticale, spelt) Oats Barley	Oidium	6 L/ha	2	
	Wheat (wheat, triticale, spelt)	Septoria	6 L/ha	2	
	Industrial and fodder beet	Foliage diseases	5 L/ha	2	
	Hops	Oidium	1,5 L/hL	6	
	Fruit crops	Peach tree - Apricot tree (peach tree, nectarine, apricot tree)	Oidium	0,5 L/hL	2 to 12
Fruit crops	Pome fruits (apple, pear)	Scab	0,7 L/hL	2 to 12	
	Pome fruits (apple, pear)				
Vegetable crops	Hazelnut tree	Oidium	1 L/hL	1 to 11	
	Beetroot Carrot (carrot, celeriac, parsnip) Celeriac Chicory - Root production Cucurbits (cucumbers, courgettes, gherkins and other edible-skinned cucurbits) Spinach Strawberry Fresh beans and peas with pods (green beans) Vegetable legumes (dry) Cucurbits with inedible skin (melon) Fresh shelled beans and peas Peppers (pepper, chilli pepper) Salsify (salsify, scorzonera) Tomato - Eggplant (tomato, eggplant)	Oidium	6 L/ha	6	
	Tomato - Aubergine (tomato, aubergine)	Acariosee bronzed	7,5 L/ha	6	
	Ornamental crops	Trees and bushes	Oidium	1 L/hL	6
	Field crops	Rose bushes	Oidium	0,3 L/hL	6

For the use of HELIOSOUFRE® S on crops related to the major crops not listed in this table, please contact ACTION PIN's technical department. ACTION PIN declines all responsibility for the use of HELIOSOUFRE® S for other uses not described in the table of uses

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wash your hands after handling/using/intervening in a previously treated plot. Do not eat, drink, telephone or smoke while using the product. The use of suitable and well-maintained equipment and the implementation of collective protection measures are the first step in protecting against occupational hazards, before the implementation of additional protection measures such as individual protection. In any case, the wearing of dedicated overalls or personal protective equipment (PPE) must be associated with hygiene practices (e.g. hand washing) and strict behaviour (e.g. dressing and undressing procedures). The cleaning and storage procedures for reusable coveralls and PPE must comply with their instructions for use.

To protect the operator and the worker, wear the personal protection recommended in the table below.

CHARACTERISTICS OF PPE	PROTECTION OF THE USER					
	PREPARATION / MIXING / LOADING	APPLICATION WITH LANCE (GREENHOUSE OR OPEN FIELD)			CLEANING	PROTECTION OF THE USER
		WITHOUT INTENSE CONTACT WITH THE VEGETATION		INTENSE CONTACT WITH THE VEGETATION		
		LOW CULTURES < 50 cm	HIGH CULTURES > 50 cm	CULTURES HIGH AND LOW		
<p><b>NITRILE GLOVES CERTIFIED NF EN ISO 374-1/A1</b> reusable (NF EN 16523-1+A1 (type A)) single use (NF EN ISO 374-2 (types A, B or C))</p> <p><b>PPE CLOTHING</b> complies with the NF EN ISO 27065/A1 standard</p> <p><b>PARTIAL PPE</b> apron or long-sleeved gown category III type PB (3)</p> <p><b>CHEMICAL PROTECTIVE SUIT</b> category III type 3 or 4</p> <p><b>LENSES or FACE SCREEN</b> certified NF EN 166 (CE, mark 3)</p> <p><b>RESPIRATORY PROTECTION</b> Half mask with aerosol filter (EN 149) class FFP3 or half mask (EN 140) with aerosol filter (EN 143) class P3</p> <p><b>BOOTS</b> certified NF EN 13832-3</p>	Reusable	Reusable	Reusable	Reusable	Reusable**	
<p>PPE clothing AND partial PPE</p> <p>OR</p> <p>Type 3 or 4*</p>	✓	✓	✓	<p>PPE clothing AND partial PPE</p> <p>OR</p> <p>Type 3 or 4*</p>	✓	
<p>OR</p> <p>Type 3 or 4*</p>	✓	Type 4 with hood	Type 3 with hood	<p>OR</p> <p>Type 3 or 4*</p>	✓	
	✓	✓	✓	✓	✓	
	✓	✓	✓	✓	✓	

\* Depending on the level of protection recommended in the application phase / \*\* In case of contact with the treated crop.

CHARACTERISTICS OF PPE	PROTECTION OF THE USER						
	PREPARATION / MIXING / LOADING	APPLICATION WITH SPRAYER MOUNTED OR TRAILED, RAMP OR PNEUMATIC				CLEANING	PROTECTION OF THE USER
		UPWARD SPRAYING		DOWNWARD SPRAYING			
		TRACTOR WITH CLOSED CAB	TRACTOR WITHOUT CAB	TRACTOR WITH CLOSED CAB	TRACTOR WITHOUT CAB		
<p><b>NITRILE GLOVES CERTIFIED NF EN ISO 374-1/A1</b> reusable (NF EN 16523-1+A1 (type A)) single use (NF EN ISO 374-2 (types A, B ou C))</p> <p><b>PPE CLOTHING</b> complies with the NF EN ISO 27065/A1 standard</p> <p><b>PARTIAL PPE</b> Apron or long-sleeved gown category III type PB (3)</p> <p><b>CHEMICAL PROTECTIVE SUIT</b> category III type 3 or 4</p> <p><b>LENSES or FACE SCREEN</b> certified NF EN 166 (CE, mark 3)</p> <p><b>RESPIRATORY PROTECTION</b> Half mask with aerosol filter (EN 149) class FFP3 or half mask (EN 140) with aerosol filter (EN 143) class P3</p> <p><b>BOOTS</b> certified NF EN 13832-3</p>	Reusable	Single use only (carried and stored outside the cabin)	Single use only	Single use only (carried and stored outside the cabin)	Single use only	Reusable	Reusable
<p>PPE clothing AND partial PPE</p>	✓	✓	✓	✓	✓	<p>PPE clothing AND partial PPE</p>	✓
	✓	Type 4 with hood					
	✓						

Return used personal protective equipment in a translucent bag to your ECO PPE partner distributor or use a company authorised to collect and dispose of dangerous sprays.

## COMPOSITION

Broad spectrum biocontrol fungicide (FRAC M02).

**700 g/l**

of sulphur

**Co-formulants**

based on terpene derivatives from

**SC**

concentrated suspension

## PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance : Light yellow, slightly viscous liquid

Odour : Terpenic

pH at 20°C : 6.5 - 7.5

Solubility in water : Dispersible

Stability : Stable > 0° C

## HOMOLOGATION

MA France: 9000222

Use: Biocontrol fungicide (FRAC M02) against septoria in wheat and powdery mildew in field crops, vines and fruit, vegetable and ornamental crops.

Registered doses : See table of uses

WFD: 24 hours

ARfD: 3 days except for

- powdery mildew on grapes: 5 days
- septoria in wheat: before flowering (BBCH59 stage)

ZNT aquatic: 5 metres

ZNT adjacent crops: 5 metres except for uses on orchards: 20 metres.

Ecotoxicity: Not classified

Fee on diffuse pollution: 0€/L

## PACKAGING AND LOGISTICS DATA



CAN OF  
10L



CONTAINER  
OF 300L



CONTAINER  
OF 600L

Article code : 3125  
Gencode : 3 519220 031253  
Recycling : ADIVALOR

Article code : 3176  
Gencode : 3 519220 031765  
Recycling : PACKONE

Article code : 3180  
Gencode : 3 519220 031802  
Recycling : PACKONE

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## TECHNICAL DESCRIPTION OF THE 300 L CONTAINER



- 300 liters HDPE container with protective metal frame.
- Mounted on a 60 x 80 cm plastic mini pallet.
- De-gassing plug.
- Emptying by fixed HDPE valve with blue valve handle and yellow tamper evident clip.
- Emptying accessory: HDPE emptying spout, attached to the container.
- 1 identification plate galvanized on both sides.
- Datamatrix insert.
- Dimensions: width 80 cm x length 60 cm x height 99.6 cm
- Net weight : 410 kilos
- Gross weight : 433 kilos

### Container recovery with the PACKONE system



- Dedicated website [www.packone.com/fr](http://www.packone.com/fr)
- Form to be filled in: collection address, contact, collection times, type and number of packages, filling product.
- Respect the basic conditions and the return conditions indicated on the website.

## LEGAL NOTICES

ACTION PIN - ZI de Cazalieu - CS 60030 - 40260 CASTETS – Phone : 05 58 55 07 00 - [www.action-pin.fr](http://www.action-pin.fr). HELIOSOUFRE® S, AMM n° 9000222. Composition: 700 g/l of micronised sulphur + terpene derivatives from pine. For authorised uses, doses, conditions and restrictions of use : refer to the product label or consult the product sheet on [www.helioterpen.fr](http://www.helioterpen.fr). Dangerous, respect the precautions of use. Registration holder: ACTION PIN. HELIOSOUFRE® S is a registered trademark of ACTION PIN.



CAUTION. EUH401 Follow instructions for use to avoid risks to humans and the environment. H318 Causes severe eye damage.

**PRODUCT FOR PROFESSIONALS: USE PHYTOPHARMACEUTICAL PRODUCTS WITH CARE. BEFORE USE, READ THE LABEL AND PRODUCT INFORMATION.**

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