

HELIOCUIVRE®

More than just copper



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 ADVICES

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.

CHARACTERISTICS

HELIOCUIVRE® is an anti-mildew fungicide for vines and anti-bacterial for fruit and vegetable crops. The liquid formulation of HELIOCUIVRE® based on copper hydroxide and terpenes derivatives offers ease of use and performance.

HELIOCUIVRE® is a liquid solution with an anti-sporulation action, effective and persistent in the protection against downy mildew on grapevine and bacterial diseases in arboriculture and vegetal crops. HELIOCUIVRE® can be used in Organic farming and can be used alone or mixed. Compatible with most phytosanitary specialties, it acts in a preventive manner and authorises the use of lower quantities of copper per hectare with proven efficacy. Pine terpenes derivatives provide numerous benefits and improve the quality of the spray mixture.

- Easy to use liquid formulation
- Anti-sporulation effect
- Exceptional covering power
- Increases retention and resistance to leaching

ADVICE FOR USE AND APPLICATION

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 HELIOCUIVRE® 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. Maintain agitation throughout the application and during transport.

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EXTEMPORANEOUS MIXTURES AND COMPATIBILITIES

When put in the tank first, HELIOCUIVRE® 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 used in accordance with the regulations in force. Carry out a compatibility test prior to any new mixture. HELIOCUIVRE® does not require the addition of an adjuvant. Respect the uses, doses, conditions and precautions for use mentioned on the packaging.

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 clear water using a suitable cleaning product.

DISPOSAL OF THE PRODUCT AND PACKAGING

When using the product, empty and rinse the can well with clear water (manual rinsing 3 times while shaking the can filled to 1/3 or mechanical rinsing for a minimum of 1 minute), taking care to pour the rinsing water into the sprayer tank. Take the opened, rinsed and drained packaging to your ADIVALOR partner distributor or to another company authorised to 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
Grapevine	Grapevine	Mildew	3 L/ha
	Grapevine	Bacterial necrosis	10 L/ha
Fruit crops	Citrus fruits	Crown canker	0,31 L/ha
	Cherry tree	Bacterial diseases	0,31 L/hL
	Peach tree - Apricot tree (peach tree, nectarine, apricot tree)		
	Plum tree		
	Tree nuts (almond, chestnut, hazelnut, walnut)		
	Olive trees		
	Pome fruits (apple, pear, nashi)		
Vegetable crops	Artichoke	Bacterial diseases	3,1 L/ha
	Celery branch		
	Celery root		
	Chicory - Root production		
	Cabbage inflorescence		
	Cabbage Leafy		
	Head cabbage		
	Kohlrabi		
	Fresh beans and peas without pods		
	Fresh beans and peas		
Onion (onion, garlic, shallot)			
Leek	Brown spot disease	3,1 L/ha	
Tomato – Eggplant (tomato, eggplant)			
Strawberry	Bacterial diseases (collar pulverisation)	0,0031 L/m ²	
Strawberry			
	Chicorees - Chicory production		

Conditions of use of the product:

Only uses resulting in a maximum total application of 28 kg of copper per hectare over a period of seven years are permitted.

Downy mildew use on grapevine : maximum 5 treatments.

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The maximum residue limits defined at EU level can be found at : <http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database>.

For the use of HELIOCUIVRE® 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 HELIOCUIVRE® for other uses not described in the table of uses.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

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

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

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

Return used personal protective equipment in a translucent bag to your ECO EPI partner distributor or contact a company authorised to collect and dispose of dangerous products.

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COMPOSITION

Broad spectrum fungicide (FRAC M01) against downy mildew on grapes and bacterial diseases on fruit and vegetable crops.

400 g/l

of copper metal
(copper hydroxide)

Co-formulants

based on pine terpenes
derivatives from pine

SC

Suspension Concentrate

PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Slightly viscous blue liquid
Odour : Terpenic
pH at 20°C : 8.5 - 9.5
Solubility in water : Dispersible
Stability : Stable > 0° C

HOMOLOGATION

MA France : 9900227

Use : Fungicide (FRAC M01) against downy mildew on grapes and bacterial diseases on fruit and vegetable crops.

Approved doses : See table of uses

WFD : 24 hours

ARD : 3 days except for downy mildew on grapes : 21 days

ZNT aquatic : 5 metres

PACKAGING AND LOGISTICAL INFORMATION



CAN OF
5L



This pictogram indicates that the packaging of this product can be collected by the distributors, partners of ADIVALOR

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LEGAL NOTICES

ACTION PIN – ZI de Cazalieu – CS 60030 - 40260 CASTETS (France) – Phone: +33 05 58 55 07 00 – www.action-pin.fr. HELIOCUIVRE®, MA n° 9900227. Composition : 400 g/l of copper metal (copper hydroxide) + co-formulants based on 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. Dangerous, respect the precautions of use. Registration holder : ACTION PIN. HELIOCUIVRE® is a registered trademark of ACTION PIN.



DANGER. EUH401 Follow instructions for use to avoid risks to humans and the environment. H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes severe eye damage. H410 Very toxic to aquatic organisms, causes long-term adverse effects.

product for professionals: use plant protection products with precaution. Read the label and product information before each application. Before using any product, make sure that it is indispensable. Whenever possible, use alternative methods and products with the lowest risk to human and animal health and to the environment, in accordance with the principles of integrated pest management, consult : <http://agriculture.gouv.fr/ecophyto>

**PRODUCT FOR PROFESSIONALS: USE PLANT PROTECTION PRODUCTS WITH PRECAUTION.
READ THE LABEL AND PRODUCT INFORMATION BEFORE EACH APPLICATION.**

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