



**RIVAL®**

Systemic fungicide with protective action against soil born disease like *Phytophthora* sp and *Pythium* sp, causing Damping off disease on tomato and ornamentals seeds, seedling, plants and transplants.

The product is a water soluble concentrate containing 722 g / L propamocarb hydrochloride (equivalent to 607 g/l propamocarb as base)

**P102** – Keep out of reach of children

**EUH208** – Contains (propamocarb hydrochloride). May cause an allergic reaction

**EUH208** – Contains (1,2-benzisothiazol-3(2H)). May cause an allergic reaction

**EUH210** – Safety data sheet available on request.

**EUH401** – To avoid risks to human health and the environmental, comply with the instructions for use.

**Name and address of the manufacturer:** AGRIA SA, Asenovgradsko shose 4009, Plovdiv, Bulgaria, tel: + 359 2 91 50 500

**Name and address of the distributor:**

**Registration number:** 0797 of 2018

**Net contents:** 1 L

**Batch number:**

Shelf life: 24 months from the date of producing

The Control of Substances Hazardous to Health Regulations (COSHH) may reply to the use of this product at work.

## SAFETY PRECAUTIONS

Operator protection

- WEAR SUITABLE PROTECTIVE CLOTHING (GLOVES AND RUBBER BOOTS) when handling the concentrate, treated plants or treated soil/substrate
- ENGINEERING CONTROL OF OPERATOR EXPOSURE MAY REPLACE PERSONAL PROTECTIVE EQUIPMENT if this provides higher standard of operator protection.
- PROTECTIVE CLOTHING, AS WELL AS THE APPLICATION EQUIPMENT MUST BE CLEANED THOROUGHLY AFTER HANDLING. Empty and rinse the application equipment completely.
- DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT
- RINSE SKIN AND EYES THOROUGHLY WITH WATER, in case of contact.
- IN CASE OF INHALATION, MOVE TO FRESH AIR.
- WASH THE PROTECTIVE CLOTHING thoroughly after handling the product, treated plants or treated soil/substrate
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- WASH HANDS after work.

#### Environmental information

Do not discharge the product remains or the water from the equipment cleaning into drains or near surface waters.

#### Storage and disposal

- STORE IN ORIGINAL CONTAINER tightly closed, in a safe place
- KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS
- PROTECT FROM FREEZING.
- DISPOSE OF CONTENTS/CONTAINERS IN ACCORDANCE WITH LOCAL/ REGIONAL/ NATIONAL/ INTERNATIONAL REGULATIONS
- DO NOT REUSE THE EMPTY CONTAINERS FOR ANY PURPOSES.

## **INSTRUCTIONS FOR USE**

### **Crop-specific information**

**RIVAL®** is recommended for use in the following areas:

#### **Situation 1**

<b>Crop/Situation:</b>	<b>Soil/Substrate disinfection for glasshouse tomatoes and ornamental flowers</b>
<b>Pest/Group of pests</b>	<b><i>Phytophthora sp, Pythium sp</i></b>
<b><u>Application category:</u></b>	<b>Agriculture</b>
<b><u>Application:</u></b>	<b>glasshouse use</b>
<b><u>Maximum application rate (s):</u></b>	<b>300 ml product per 1 cubic meter soil/substrate</b>
<b><u>Water application rate:</u></b>	<b>10 – 20 L per 1 cubic meter soil/substrate</b>
<b><u>Time of application:</u></b>	<b>Before sowing</b>
<b><u>Maximum number of applications:</u></b>	<b>1</b>
<b><u>Interval between applications in days:</u></b>	<b>—</b>
<b><u>Waiting period in days:</u></b>	<b>—</b>
<b><u>Re-entry period in days:</u></b>	<b>—</b>
<b><u>Application Type:</u></b>	<b>soil incorporation</b>

#### **Situation 2:**

<b>Crop/Situation:</b>	<b>Glasshouse tomatoes – drenching</b>
<b>Pest/Group of pests</b>	<b><i>Phytophthora sp, Pythium sp</i></b>
<b><u>Application category:</u></b>	<b>Agriculture</b>
<b><u>Application:</u></b>	<b>glasshouse use</b>
<b><u>Maximum application rate (s):</u></b>	<b>5 ml product per 1 square meter</b>
<b><u>Water application rate:</u></b>	<b>3-5 L per square meter</b>
<b><u>Time of application:</u></b>	<b>at sowing/planting</b>
<b><u>Maximum number of applications:</u></b>	<b>3</b>
<b><u>Interval between applications in days:</u></b>	<b>7-10</b>
<b><u>Waiting period in days:</u></b>	<b>—</b>
<b><u>Re-entry period in days:</u></b>	<b>—</b>
<b><u>Application Type:</u></b>	<b>Drenching</b>

#### **Situation 3:**

<b>Crop/Situation:</b>	<b>Glasshouse ornamental flowers – drenching</b>
<b>Pest/Group of pests</b>	<b><i>Phytophthora sp, Pythium sp</i></b>

<u>Application category:</u>	Agriculture
<u>Application:</u>	glasshouse use
<u>Maximum application rate (s):</u>	10 ml product per 1 square meter
<u>Water application rate:</u>	3 L per square meter
<u>Time of application:</u>	at sowing/planting
<u>Maximum number of applications:</u>	2
<u>Interval between applications in days:</u>	14-21
<u>Waiting period in days:</u>	—
<u>Re-entry period in days:</u>	—
<u>Application Type:</u>	Drenching

### **Mode of Action**

**RIVAL®** inhibits the biosynthesis of phospholipid and fatty acid and in this way reduces mycelial growth and the development of zoo spores and sporangia.

### **NOTE**

The information in the next sections is approved as part of the product label. The following instructions are to be considered in order to ensure the efficient and safe use of the product.

### **Measures for an appropriate resistance management**

The development of resistance is an increasing problem worldwide. At present, cases of resistance in central and southern Europe are low. Resistance is most likely to be generated in uses where propamocarb-based products are applied frequently or where alternative fungicides are not readily available.

In the event of resistance being noted this should be reported to the supplier and the regulatory authority.

### **Mixing**

Always mix **RIVAL®** in clean sprayer/container. Fill the equipment up to its half volume with clean water, add the needed quantity of the product with agitation, than full fill the equipment and mix thoroughly.

After the application rinse the equipment three times with water. Application Equipment

### **Compatibility**

The use of the product **RIVAL®** as a mixture has not been evaluated for its safety and efficacy with respect to the treated crops.

Spray the product only in accordance with the instructions for use.

AGRIA assumes no liability for damage caused by improper use or storage of the product.

### **Warnings and Restrictions**

- Keep away from reach of children and pets
- Avoid any unnecessary contact
- Do not use empty packaging for any purposes
- For soil disinfection, apply once per crop with maximum total dose of 300 ml product per cubic meter soil/substrate
- For drenching, apply maximum 3 times per crop with maximum dose per crop cycle of 18 ml product per square meter
- The product should not be applied during too high or too low temperatures or on stressed plants as the effect can be reduced
- Do not exceed the maximum concentration of the work solution
- Use the product only for the crops/situations listed in this label
- Do not leave spray solution or mixtures in the spray tank for long periods after application

### **Rotational crops**

**RIVAL®** has no negative effect on the rotational crops

### **Processing crops**

**RIVAL®** may be applied to recommend crops subsequently used for human consumption or animal feeding stuffs

### **Application method**

The product can be applied using any conventional high volume ground spraying equipment or watering can for soil/substrate disinfection (soil/substrate incorporation) and drenching