

# Orient<sup>®</sup>



## MAPP 12541

A suspension concentrate containing 7.5 g/l picolinafen and 330 g/l pendimethalin, for use in winter and spring wheat, winter and spring barley, rye and triticale.

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

### SAFETY PRECAUTIONS

#### Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

WASH HANDS before meals and after work.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

IF YOU FEEL UNWELL seek medical advice (show the label if possible).

#### Environmental protection

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 metres of the top of the bank of a static or flowing water body, unless a Local Environmental Risk Assessment for

Pesticides (LERAP) permits a narrower buffer zone, or within 1 metre from the top of a ditch which is dry at the time of application. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme.

Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone must be maintained.

The results of the LERAP must be recorded and kept available for three years.

#### Storage and disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS. KEEP OUT OF REACH OF CHILDREN.

DO NOT RE-USE CONTAINER for any other purpose.

STORE IN ORIGINAL CONTAINER tightly closed, in a safe place.

On emptying the container, RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times.

Add washings to sprayer at time of filling and dispose of container safely.

**This label is compliant with the CPA Voluntary Initiative Guidance**

#### Supplied by:

BASF plc, 4th and 5th Floors, 2 Stockport Exchange, Railway Road, Stockport, SK1 3GG  
Telephone: 0161 475 3000

Emergency Information (24 hours freephone):

0049 180 227 3112

Technical Enquiries: 0845 602 2553 (office hours)



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The  
Voluntary  
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# Orient®

A suspension concentrate containing 7.5 g/l picolinafen and 330 g/l pendimethalin and 1, 2-benzisothiazole.

## Warning

**May cause an allergic skin reaction.**

**Suspected of damaging the unborn child.**

**Very toxic to aquatic life with long lasting effects.**

If medical advice is needed, have product container or label at hand.

Wear protective gloves, protective clothing and eye protection or face protection.

Avoid breathing mist/vapours/spray.

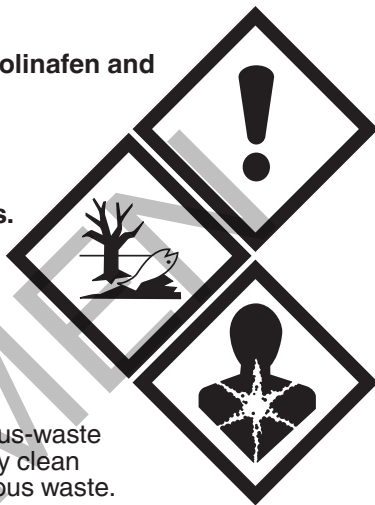
IF ON SKIN: Wash with plenty of soap and water.

Store locked up.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

May produce an allergic reaction. Contains: reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3- one [EC no. 220-239-6] (3 :1) and 1, 2-benzisothiazole.

To avoid risks to human health and the environment, comply with the instructions for use.



## IMPORTANT INFORMATION

**FOR USE ONLY AS AN AGRICULTURAL HERBICIDE, as directed below:**

Crop	Application Timing	Maximum Individual Dose (litres product/ha)	Maximum Number of Treatments (per crop)	Latest Time of Application
Winter barley, winter wheat, rye, triticale.	Pre- and post-emergence	4.0	1	Before pseudo-stem erect (before growth stage 30)
Spring barley, spring wheat	Pre-emergence OR Post-emergence	4.0 OR 2.0	1	Pre-emergence of the crop OR Before pseudo-stem erect (before growth stage 30)

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

## DIRECTIONS FOR USE

**IMPORTANT:** This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

Orient is a herbicide containing pendimethalin and picolinafen with residual and contact activity for use in winter and spring wheat and winter and spring barley, rye and triticale.

## Restrictions/Warnings

DO NOT use more than one application of Orient in one growing season.

### Soil Types

- Orient can be used on any mineral soil.
- Residual control may be reduced on soils with more than 6% organic matter.
- DO NOT use on soils with more than 10% organic matter.
- DO NOT use on stony or gravelly soils as crop damage can occur, particularly if heavy rain follows treatment.
- DO NOT use on water logged soil or soils prone to water logging.

### Seedbed preparation

- Seed beds must have a fine, firm tilth. Loose or cloddy seed beds must be consolidated prior to application, otherwise reduced weed control may occur. They may also cause seed to be inadequately covered which could result in crop damage.

### Application

- For pre-emergence applications, seed should be covered with a minimum of 3.2 cm of settled soil.
- Only treat shallow drilled crops post-emergence.
- Do not spray undersown cereals or those to be undersown.
- Avoid spraying during periods of prolonged or severe frosts.
- Do not apply to crops suffering from stress, which may be caused for example by pests, disease, water logging, poor seedbed conditions or previous chemical treatment.
- **Extreme care should be taken to avoid damage by drift on to plants outside the target area.**

### Emerged Crops

- Do not roll emerged crops prior to application.

### Post-Application Requirements

- Do not soil incorporate.
- Do not disturb the soil after application.
- Do not roll autumn treated crops until the spring.
- For residual control some soil moisture is required for Orient. Best results will be obtained if rain falls within 7 days of application. Residual control may be reduced under prolonged dry conditions.
- Water logging that occurs soon after pre-emergence applications may lead to crop damage.

Some transient bleaching may be seen after application to some crops, in most cases this does not lead to yield loss. In rye, however, post-emergence applications may reduce yield.

Concentrated or diluted Orient may stain. Avoid spillage. Staining is minimised or completely removed if skin/clothes are washed immediately.

## Weed control

### Susceptibility of weeds to single applications of Orient

Best results will be achieved by application to small actively growing weeds.

	2.0l/ha Orient		4.0l/ha Orient	
	Pre-em	Post-em	Pre-em	Post-em
<b>GRASS WEEDS</b>				
Annual Meadow-grass	-	-	S	S up to GS13
Rough Meadow-grass	-	MR up to 2 lvs	MS	MS up to 2 lvs
Loose Silky Bent	-	-	-	S up to 1 leaf
<b>BROAD-LEAVED WEEDS</b>				
Bird Vetch	-	-	-	MS up to 3 lvs
Black Bindweed	-	-	S	-
Charlock	-	-	MS pre-em	S up to 6 lvs
Cleavers	-	-	-	MS up to 1 whorl
Common Chickweed	S	MS up to 2 lvs	S	S up to 6 lvs
Common Field Speedwell	S	MS up to 1 leaf	S	S up to 6 lvs
Common Fumitory	-	-	MS	S up to 3 lvs
Common Orache	-	-	S	-
Common Poppy	-	-	S	S up to 6 lvs
Corn Marigold	-	-	S	-
Crane's-bill	-	-	-	S up to 4 lvs
Fat-hen	-	-	S	S up to 1 leaf
Field Forget-me-not	-	-	S	-
Field Pansy	-	S up to 1 leaf	S	S up to 6 lvs
Hemp-nettle (Day Nettle)	-	-	S	S pre-em
Henbit Dead-nettle	-	-	S	-
Ivy-leaved Speedwell	-	-	S	S up to 6 lvs
Knotgrass	-	-	S	-
Mayweeds	-	-	MS	-

	2.0l/ha Orient		4.0l/ha Orient	
	Pre-em	Post-em	Pre-em	Post-em
Pale Persicaria	-	-	MS	-
Parsley Piert	-	-	S	S up to 2 lvs
Red Dead-nettle	-	-	S	S up to 6 lvs
Redshank	-	-	MS	-
Scarlet Pimpernel	-	-	S	-
Shepherd's Purse	-	-	MS	S up to 6 lvs
Small Nettle	-	-	S	-
Smooth Sowthistle	-	-	S	-
Volunteer Beans	-	-	MR	R
Volunteer Oilseed Rape (1)	-	-	S	MS up to 2 lvs

S= Susceptible

MS = Moderately susceptible

R = Resistant

MR = Moderately resistant

(1) = deep germinating volunteer Oilseed Rape may not be controlled.

### Resistance Management

GROUP	3	12	HERBICIDES
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Strains of some annual grasses (e.g. Black-grass, Wild-Oats, and Italian Ryegrass) have developed resistance to herbicides, which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. Picolinafen is an inhibitor of carotenoid biosynthesis at the PDS step (a group that includes picolinafen and diflufenican). To prevent the development of resistant weeds herbicides with different modes of action must be used when applying in sequence. Guidelines have been produced by the Weed Resistance Action Group and copies are available from HGCA, CPA, your distributor, crop adviser or product manufacturer.

### Crop Specific Information

Orient can be used on all varieties of winter and spring wheat, winter and spring barley, rye and triticale.

### Time of application

Pre- and post crop-emergence, up to before pseudo-stem erect (before growth stage 30).

Post-emergence applications may reduce yield in Rye.

For autumn drilled crops DO NOT apply pre-emergence to crops drilled after 30 November.

### Rate of application

4.0 l/ha pre or post crop-emergence in winter wheat, winter barley, rye and triticale

4.0 l/ha pre or 2.0 l/ha post crop-emergence in spring wheat and spring barley.

## Following Crops

Before rye-grass is drilled after a very dry season, plough or cultivate to at least 15 cm. In the event of crop failure the land must be ploughed or thoroughly cultivated to a minimum depth of 15 cm to ensure any residues are evenly dispersed throughout the soil. The minimum intervals (specified below) should elapse between the application of 'Orient' and the sowing of one of the following crops listed below.

### Autumn Applications of Orient

The following crops may be sown after a minimum of 5 months:

Spring Barley	Spring Field Beans	Brussels Sprouts	Carrots
Spring Wheat	Broad Beans	Cabbage	Parsnips
Maize	Dwarf Beans	Calabrese	Parsley
Peas	Turnip	Linseed	Cauliflower
Potatoes			

### Following Spring and Early Summer Applications

The following crops may be sown or transplanted after a minimum interval of 2 months:

Spring Field Beans	Brussels Sprouts	Carrots
Broad Beans	Cabbage	Parsnips
Dwarf Beans	Calabrese	Parsley
Peas	Cauliflower	Linseed
Turnip		

The following crops may be sown after a minimum interval of 5 months:

Any crop (with the exception of Red Beet, Sugar Beet and Spinach) may be planted or sown.

(A minimum interval of 12 months should elapse between application and sowing Red Beet, Sugar Beet and Spinach).

## Mixing and Application

### Mixing

Apply Orient in 200 litres water/ha.

Ensure good, even spray cover of the target using a spray of **fine** or **medium** quality (BCPC definition). Never prepare more spray solution than is required.

Fill the spray tank three quarters full with water and start the agitation.

To ensure thorough mixing of the product, invert the container several times before opening.

Add the required quantity of Orient to the spray tank while re-circulating and then the remainder of the water.

Continue agitation until spraying is completed.

On emptying the product container, rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times.

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## Trade Mark Acknowledgments

Orient is a registered trademarks of BASF.

## The following does not form part of the authorised label text.

With many products there is a general risk of resistance developing to the active ingredients. For this reason a change in activity cannot be ruled out. It is generally impossible to predict with certainty how resistance may develop because there are so many crop and use connected ways of influencing this. We therefore have to exclude liability for damage or loss attributable to any such resistance that may develop. To help minimise any loss in activity the BASF recommended rate should in all events be adhered to.

Numerous, particularly regional or regionally attributable, factors can influence the activity of the product. Examples include weather and soil conditions, crop plant varieties, crop rotation, treatment times, application amounts, admixture with other products, appearance of organisms resistant to active ingredients and spraying techniques. Under particular conditions a change in activity or damage to plants cannot be ruled out. The manufacturer or supplier is therefore unable to accept any liability in such circumstances. All goods supplied by us are of high grade and we believe them to be suitable, but as we cannot exercise control over their mixing or use or the weather conditions during and after application, which may affect the performance of the material, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use; but nothing should be deemed to exclude or restrict any liability upon us which cannot be excluded or restricted under the provisions of the Unfair Contract Terms Act 1977 or any similar applicable law.

## Section 6 of the Health and Safety at Work Act

### Additional Product Safety Information

The product label provides information on a specific pesticidal use of the product; do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required and that the particular use has “off-label” approval or is otherwise permitted under the Plant Protection Products Regulations.

The information on this label is based on the best available information including data from test results.

## Safety Data Sheet

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:



[agricentre.basf.co.uk/Orient/MSDS](http://agricentre.basf.co.uk/Orient/MSDS)

Alternatively, contact your supplier.

SPECIMEN

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