

COSINE®

MAPP 16404

GROUP U6 FUNGICIDE

An emulsion in water formulation containing 50 g/l cyflufenamid for the control of powdery mildew in apples and pears.

FUNGICIDE

F

Net content

1L

READ CAREFULLY
BEFORE USE

PROTECT FROM FROST

Production date / Batch number:
see packaging.

For advice on medical
emergencies, fires, spillages
or chemical hazards ONLY –
phone Carechem 24 EU:
01235 239670

For technical and
non-emergency calls
phone 0845 373 0305

Authorisation Holder:
Nisso Chemical Europe GmbH
Berliner Allee 42
40212 Dusseldorf
Germany

© Registered Trademark
of Nippon Soda Co., Ltd

IMPORTANT INFORMATION FOR USE ONLY AS A HORTICULTURAL FUNGICIDE

Crops	Maximum individual dose	Maximum number of applications	Latest time of application
Apple and Pear	0.5 L product per hectare	2 per crop	14 days before harvest

Other specific restriction

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a broadcast airassisted 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.

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.

THE (COSH) 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 GLOVES when handling the concentrate.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

Environmental Protection

Do not contaminate water with the product or its container.
Do not clean applicator equipment near surface water.

Avoid contamination via drains from farmyards and roads.



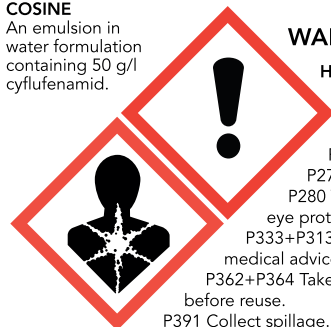
DO NOT ALLOW DIRECT SPRAY from broadcast air-assisted sprayers to fall within 5 metres of the top of the bank of a static or flowing waterbody, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 5 metres of the top of a ditch which is dry at the time of application. Aim spray away from water.

Storage and Disposal

RINSE CONTAINER THOROUGHLY by using an integrated pressure device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.
DO NOT RE-USE EMPTY CONTAINER for any purpose.
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.
KEEP OUT OF THE REACH OF CHILDREN.

COSINE

An emulsion in water formulation containing 50 g/l cyflufenamid.



WARNING

H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
H317 MAY CAUSE AN ALLERGIC SKIN REACTION.

P261 Avoid breathing vapours, spray.

P273 Avoid release to the environment.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P501 Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed, empty, clean containers which can be disposed of as non-hazardous waste.

EUH 401 To avoid risks to human health and the environment, comply with the instructions for use.

Contains 1,2-Benzisothiazolin-3-one.

UFI: S050-407P-J00U-2ED5

05350201_2633 • 10704411:UK



Certis Belchim
GROWING TOGETHER

Marketing Company: **Certis Belchim BV**
Suite 5, 3 Riverside, Granta Park, Great Abington, Cambridgeshire CB21 6AD
Tel: 01223 652500 | Email: info.uk@certisbelchim.com
www.certisbelchim.co.uk

DIRECTIONS FOR USE

READ CAREFULLY BEFORE OPENING THE BOTTLE

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 use and successful use of this product.

COSINE is a protectant fungicide with useful curative activity against Powdery mildew on apples and pears.

APPLES AND PEARS

Crop safety and timing

COSINE can be used on all varieties of apples and pears.

Mixing

Half-fill the spray tank with clean water. Commence agitation. Add the recommended quantity of COSINE to the spray tank. Complete filling and maintain agitation of the solution before and during spraying until the tank is empty.

Rate, water volume and application

Rate: 0.5 L COSINE per hectare.

Maximum number of applications

A maximum of two applications of COSINE may be applied per year.

Application interval

A minimum period of 7 days must be observed between COSINE applications

Water Volume: Apply the recommended dose of 0.5 l/ha to full height trees typical of UK orchards at full canopy density.

Where tree height and/or canopy density is reduced, the dose (and water volume) should be adjusted in accordance with an appropriate dose adjustment scheme. Consult your specialist advisor for further information.

A water volume of 200-1500 litres per hectare is recommended. It is important to ensure that good overall coverage achieved.

Spray quality: FINE or MEDIUM (as defined by the BCPC) using a conventional hydraulic sprayer.

Time of application

For best results COSINE should be applied at the first visible signs of infection by Powdery mildew providing a minimum of 7 days between COSINE applications is observed. Where disease pressure remains high or re-infection occurs, a further application of COSINE can be made to the crop.

Latest time of application

14 days before harvest.

Resistance management

The mode of action of cyflufenamid is different to that of fungicides from other groups. There are no known cases of cross resistance to cyflufenamid in pathogens that have developed reduced sensitivity to other fungicides.

Disease control may be reduced if strains of pathogens less sensitive to cyflufenamid develop. Guidelines issued by FRAC may help to reduce the onset of resistant strains:

- Apply COSINE at the start of foliar disease attack.
- COSINE must be used as part of an Integrated Crop Management programme that includes use in alternation or tank-mixture with fungicides with different modes of action effective against powdery mildew AS WELL AS non-chemical methods of disease management.
- Do not apply consecutive applications of products containing cyflufenamid.
- Apply according to manufacturers recommendations at the specific crop growth stage indicated.
- Apply a maximum of 2 sprays per cereal crop.

Rainfastness

COSINE is rainfast within one hour.

Restrictions

Do not apply COSINE to crops under stress from drought, waterlogging, cold, pests or diseases, nutrient or lime deficiency or other factors reducing plant growth.

Succeeding and replacement crops

There are no restrictions on the planting of any succeeding or rotational crop following the application of COSINE.

Spray tank clean-out

Immediately after spraying COSINE, drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with water and a commercially available cleaning agent. Rinse inside of tank with clean water and cleaning agent and flush through boom and hoses using at least one tenth of the spray tank volume. Drain completely. Repeat rinsing as above. Do not contaminate surface waters or ditches with rinse water or empty containers.

Warning

Avoid spray drift onto ponds, waterways and ditches.

Consult processor before using on crops grown for processing

CONDITIONS OF SUPPLY

The Seller warrants that the goods shall at the time of delivery to the Buyer conform to the Seller's standard specification but all other conditions and warranties, whether express or implied by statute or custom of the trade or otherwise and whether as to condition, quality, performance, merchantability, fitness for any purpose or otherwise, are expressly excluded and, subject as aforesaid, the Seller shall be under no liability whatsoever, in contract or in tort, for or in respect of any loss or damage whatsoever resulting from or arising out of the goods or supply or use thereof, whether caused by the negligence of the Seller or otherwise. The Seller shall be under no liability in respect of the warranty given above unless the Buyer allows the Seller reasonable opportunity of inspecting the goods where practicable. A consumers statutory rights are not affected.

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:
WEBLINK to specific data sheet on manufacturer's website:



https://certisbelchim.co.uk/pdf/MSDS/Cosine_MSDS.pdf

Alternatively, contact your supplier.

SPECIMEN