

# MIXANIL®

(MAPP 15675)

A suspension concentrate containing 50 g/l cymoxanil and 375 g/l chlorothalonil.

A fungicide for use on all varieties of early and main crop potatoes for the control of foliar late blight.

## IMPORTANT INFORMATION - FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE

Crops	Maximum individual dose (l product/hectare):	Maximum total dose (litres per crop):	Minimum application interval:	Latest time of application:
Early and main crop potatoes	2.0	4.0	7-10 days	30 days before harvest

**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.**

Shake well before use. Protect from frost. **IMPORTANT** The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

## WARNING



May cause an allergic skin reaction.

Causes serious eye irritation. Harmful if inhaled.

May cause respiratory irritation.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure (blood, thymus).

Suspected of damaging the unborn child.

Very toxic to aquatic life with long lasting effects.

Avoid breathing spray.

Avoid release to the environment.

Wear protective gloves/clothing and eye/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

IF eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

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

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

Safety data sheet available on request

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

For 24 hour emergency information Telephone 01763 212100

Net contents:

**10Le**

Batch Number:

**SIPCAM U.K.**

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## **SAFETY PRECAUTIONS**

### **Operator Protection**

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

WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES when handling 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 CONCENTRATE from skin and eyes immediately.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before meals and after work.

TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.

IF SWALLOWED, seek medical advice immediately and show this container or label.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, seek medical advice immediately and show label where possible.

### **Environmental Protection**

This material and its container must be disposed of in a safe way.

Use appropriate containment to avoid environmental contamination.

Do not contaminate water with the product or its container. Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads.

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m of the top of the bank of a static or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application. DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 m of the top of the bank of a static or flowing water body. 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 PSD'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.

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

Keep locked up and out of the reach of children.

Do not empty into drains.

This material and its container must be disposed of in a safe way.

Avoid release to the environment. Refer to special instructions/safety data sheets.

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# DIRECTIONS FOR USE

## Disease Control

Blight on potatoes (*Phytophthora infestans*) is a disease which is variable in its occurrence and severity. MIXANIL allows the use of a flexible programme to retain continuous healthy foliage free from this disease. MIXANIL combines the local systemic action of cymoxanil and the protectant activity of chlorothalonil. MIXANIL will control strains of blight both resistant and sensitive to phenylamides.

The rapid penetration of cymoxanil into the leaf and its post-infection, curative activity means that MIXANIL provides blight protection both inside and outside the leaf and is effective even in wet weather.

## Crops

All varieties of early and maincrop potatoes may be treated with MIXANIL. On crops grown for processing consult your processor before use. MIXANIL must not be applied to crops being grown for seed production.

## APPLICATION RATES AND TIMING

### Timing and Weather

Spraying should commence when the crop meets within the rows or immediately should the first blight infection period occur e.g. as notified by MAFF, the Scottish Colleges of Agriculture, DANI.

Applications should be repeated at 7-10 day intervals, using the shorter spray interval when disease pressure is extreme or weather conditions are conducive to infection or where crops are irrigated.

MIXANIL should be used as part of a spray programme in sequence with other fungicides, including those with different modes of action to reduce the risk of resistance occurring.

Note: Following the harvest of first early and second early crops any haulm that remains should be completely destroyed or removed immediately, as failure to do so will result in high blight pressure on neighbouring maincrop potatoes.

## Dose

Apply MIXANIL at 2.0l/hectare.

## Volume and Application

Apply MIXANIL in 250-450 litres of water per hectare.

## Spray Quality

Apply MIXANIL as a MEDIUM spray as defined in the BCPC system.

## Mixing, Application and Cleaning

Before use ensure that all application equipment is clean. Add half the required volume of water and start agitation, add the required quantity of MIXANIL. Fill the tank to the required volume whilst maintaining agitation. Continuous agitation must be maintained until spraying is complete.

All application equipment must be thoroughly cleaned with water prior to storage or use on another crop. Wash out the spray tank thoroughly after use.

Equipment washings should be disposed of safely following the Code of Practice for Using Plant Protection Products and relevant Environmental Agency guidance.

MIXANIL® is a registered trademark of Oxon Italia S.p.A. **Approval Holder:** Oxon Italia SpA, Via Sempione 195, 20016 Pero (MI) Italy.  
**Marketing Company:** Sipcam UK Limited, 4C Archway House, The Lanterns, Melbourn Street, Royston, Herts, SG8 7BX. Tel: +44 (0)1763 212100.  
Fax: +44 (0)1763 212101. **Registration holder:** Oxon Italia S.p.A. via Sempione 195, 20016 Pero (MI). SIPCAM UK CONDITIONS OF SUPPLY: We accept responsibility for this product meeting the declared specification and also for our written directions for use and warnings. Users however should be aware that no responsibility can be accepted for use which disregards our written instructions, including directions, warnings and precautions, nor for any advice given by any person whether verbal or written, about storage, mixing and application, or about any use which is not strictly in accordance with our written instructions.

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# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF SUBSTANCE, PREPARATION AND COMPANY

Product name – MIXANIL.

Use – Fungicide.

Formulation Type – Suspension Concentrate.

Supplier – Sipcam UK Limited, 4C Archway House, The Lanterns, Melbourn Street, Royston SG8 7BX.

Emergency phone no – Office 01763 212100.

## 2. HAZARDS IDENTIFICATION

Classification of substance and mixture according to Regulation (EC) Number 1272/2008

### WARNING



H317 MAY CAUSE AN ALLERGIC SKIN REACTION.

H319 CAUSES SERIOUS EYE IRRITATION.

H332 HARMFUL IF INHALED.



H335 MAY CAUSE RESPIRATORY IRRITATION.

H351 SUSPECTED OF CAUSING CANCER.



H361 SUSPECTED OF DAMAGING THE UNBORN CHILD.

H373 MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE (BLOOD, THYMUS).

H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

Additional information For the wording of precautionary (P) phrases refer to section 15.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients (according to Directive 1999/45/EC).

CAS/EINECS	H Phrases	%
57966-95-7 / 261-043-0	H302, H317, H410	4.2%
chlorothalonil 1897-45-6 / 217-588-1	H330, H351, H318, H317, H325, H400, H410	31.5%

Additional information– For the wording of the listed risk phrases refer to section 16.

## 4. FIRST AID MEASURES

**General information** – Instantly remove any clothing soiled by the product. Symptoms of poisoning may occur even after several hours, therefore medical observation for at least 48 hours after the incident.  
**After inhalation** – Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness bring patient into stable side position for transport.

**After skin contact** – Instantly wash with water and soap and rinse thoroughly.

**After eye contact** – Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**After swallowing** – In case of persistent symptoms, call for medical help.

**Information for doctor** – Treat symptomatically and supportively.

**Indication of any immediate medical attention and special treatment needed** – No further relevant information available

## 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media** – CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

**Special hazards arising from the substance or mixture** – Formation of toxic gases is possible during heating or in case of fire. Can be released in case of fire: Nitrogen oxides (NO<sub>x</sub>) / Carbon monoxide (CO) / Hydrogen chloride (HCl).

**Protective equipment** – Do not inhale explosion gases or combustion gases. Wear self-contained breathing apparatus / put on breathing apparatus.

**Additional information** – Collect contaminated fire fighting water separately, it must not enter drains. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** – Ensure adequate ventilation. Wear protective clothing.

**Environmental precautions** – Avoid release to the environment. Inform respective authorities in case product reaches water or sewage system. Do not allow to enter drainage system, surface or ground water.

**Methods and material for containment and cleaning up** – Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling** – Keep containers tightly sealed. Prevent formation of aerosols. Store in cool dry place.

**Information about protection against explosions and fires** – Protect from heat. The product is not flammable.

**Conditions for safe storage, including any incompatibilities**  
**Storage**

**Requirements to be met by storerooms and containers** – Store only in the original container. Store in a well ventilated location.

**Information about storage in one common storage facility** – Store away from foodstuffs. Do not store together with reducing agents, heavy-metal compounds, acids or alkalis.

**Further information about storage conditions** – Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Protect from frost. Protect from heat and direct sunlight.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**Components with limit values that require monitoring at the workplace** – Cymoxanil (2.5-10%): TWA 5 mg/m<sup>3</sup>.

**Personal protective equipment** – The usual precautionary measures should be adhered to general rules for handling chemicals.

Avoid skin contact with the liquefied material.

Do not eat, drink or smoke while working.

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

**Breathing equipment** – Breathing protection recommended.

Recommended filter device for short term use Filter AX.

**Protection of hands** – Protective rubber gloves.

**Eye protection** – Safety glasses.

**Body protection** – Protective work clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance –

Form – Liquid.

Colour – Whitish.

Odour – Weak, characteristic.

pH (1% aqueous) – 4.28.

Melting point or range – Not determined.

Boiling point/range – > 100°C.

Flash point – Not applicable.

Self-ignitability – Product is not self-igniting.

Danger of explosion – Product is not explosive.

Viscosity – 1207 mm<sup>2</sup>/s

Surface tension – 33.8 mN/m

Solubility / Miscibility (water) – Dispersible.

Density – 1.2 g/cm<sup>3</sup>.

## 10. REACTIVITY AND STABILITY

Thermal decomposition / conditions to be avoided –

No decomposition if used according to specifications.

Possibility of hazardous reactions – No further relevant information available.

Conditions to avoid – No further relevant information available.

Incompatible materials – No further relevant information available.

## 11. TOXICOLOGICAL INFORMATION

LD/LC50 values that are relevant for classification –

Oral LD50 >2000 mg/kg (rat)

Dermal LD50 >4000 mg/kg (rat)

Inhalation LC50/4 h 1.037 mg/l (rat)

Skin Irritation – No irritant effect.

Eye Irritation – Irritant.

Sensitisation – Sensitisation possible by skin contact.

## 12. ECOLOGICAL INFORMATION

Aquatic toxicity (formulated product) –

EC 50 – 54 (72h) mg/l (algae).

LC 50 – 0.3 (48h) mg/l (*daphnia magna*).

LC 50 – 0.11 (96h) mg/l (rainbow trout (*oncorhynchus mykiss*)).

Note – Very Toxic for aquatic organisms.

Persistence and degradability – No further relevant information available.

Bio accumulative potential – Cymoxanil and mancozeb have low bioaccumulation potential.

Mobility in soil – No further relevant information available.

## 13. DISPOSAL

Waste or used preparation – This material and its container must be disposed of in a safe way. Collect spillage

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

## 14. TRANSPORT

UN-Number (ADR, IMDG, IATA) – 3082

Proper shipping name (ADR, IMDG, IATA) – 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (chlorothalonil (ISO))

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cymoxanil (ISO))

Hazard class (ADR, IMDG, IATA) – Class 9 Miscellaneous dangerous substances and articles. Label 9+P. Packing group III

Marine pollutant – Yes

Special marking (ADR) – Symbol (fish and tree)

Special precautions (user) – Warning: Miscellaneous dangerous substances and articles.

Kemler Number – 90

EMS Number – F-A,S-F

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code – Not applicable.

ADR Transport/Additional information – Tunnel restriction code: D/E

## 15. REGULATORY INFORMATION

Hazard-determining components of labelling:	Cymoxanil, Chlorothalonil.
Precautionary (P) statements:	
P261	Avoid breathing spray
P280	Wear gloves, protective clothing and eye/face protection
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment
P305+351+338	IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	If exposed or concerned. Get medical advice/attention.
P337+313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage
P403+233	Store in a well ventilated room. Keep container tightly closed.
P501	Dispose of contents/container to a licensed waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

## 16 OTHER INFORMATION

### H Phrases referenced in section 3

H302	Harmful if swallowed.
H330 Acute tox 2	Fatal if inhaled.
H351 Carc 2	Suspected of causing cancer.
H318 Eye Dam 1	Causes serious eye damage
H317 Skin sens 1	May cause an allergic skin reaction
H335 STOT SE 3	May cause respiratory irritation
H400 Aquatic acute 1	Very toxic to aquatic life
H410 Aquatic chronic 1	Very toxic to aquatic life with long lasting effects

Prepared by Sipcam UK Ltd to the best of our current knowledge and information. No responsibility is accepted that the information will be sufficient or correct in all cases. November 2014.