



XERTON[®]

HERBICIDE

PCS 05702

FOR USE AS AN AGRICULTURAL HERBICIDE
FOR PROFESSIONAL USE ONLY

XERTON is a post-emergence herbicide for use on winter wheat
to control Annual Meadow-grass.

Suspension concentrate (SC) formulation containing 417 g/L of ethofumesate.

SAFETY INFORMATION



Warning

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

Avoid breathing dust/fumes/gas/mist/vapours/spray.

Do not eat, drink or smoke when using this product.

Contaminated clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

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

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

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

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

PCS 05702

A1.0 XERTON IE 220217 NgA-05702



INSTRUCTIONS FOR USE	
Crops:	Winter Wheat
Maximum individual dose:	0.6 L product/ha
Maximum total dose:	0.6 L product/ha
Latest time of application:	Six leaf stage (BBCH 16)
OTHER SPECIFIC RESTRICTIONS	
To protect groundwater the maximum total dose must not exceed 1 kg ethofumesate per hectare in any three year period.	
READ ALL SAFETY PRECAUTIONS AND DIRECTIONS FOR USE BEFORE USE	

SAFETY PRECAUTIONS

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate.
KEEP OUT OF REACH OF CHILDREN.
KEEP AWAY FROM FOOD, DRINK OR ANIMAL FEEDING STUFFS.
RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device. After use, thoroughly wash out the sprayer with a minimum of two flushes of water. Add washings to sprayer at time of filling and dispose of safely.

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).

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.

RATES OF USE

Apply a maximum of 0.6 litres XERTON per hectare as a post crop emergence application between crop growth stages BBCH 12 and BBCH 16 (two leaf to six leaf stage), within a treatment programme with other herbicides.

RESTRICTIONS/ WARNINGS

- DO NOT overlap spray bouts when used alone or in sequence with other herbicides.
- AVOID spray drift onto neighbouring crops.
- Do not apply to crops that are undersown or those due to be undersown.
- Do not roll or harrow at application or within one week before application.
- XERTON should only be used on varieties primarily planted in the winter that typically require vernalisation.

Weather conditions

In seasons of above average rainfall, or where heavy rain falls shortly after application, the overall level of weed control may be reduced. Do not spray during prolonged periods of frosty weather or when frost is imminent.

APPLICATION

Apply as an overall spray using conventional powered hydraulic sprayers in 200 L water/ha.

MIXING

Half fill the spray tank with water and start agitation. Add the required amount of XERTON to the sprayer tank and fill up with water whilst agitating. Use immediately. Continue agitation until spraying is complete.

WEEDS CONTROLLED

XERTON is a selective systemic herbicide for the control of Annual Meadow-grass (*Poa annua*) when weeds are between one true leaf and early tillering (BBCH 11-21). The following table lists the susceptibility which is dependent on the weed growth stage:

Weed growth stage:	Early (GS 11-13)	Late (GS 14-21)
Susceptibility:	Susceptible	Moderately Susceptible

CROP SAFETY

All currently approved varieties of winter wheat may be treated with XERTON. Do not apply to crops suffering from stress, which may be caused for example by pests, disease, waterlogging, poor seed bed conditions, frost, wind or hail damage or previous chemical treatments.

Succeeding crops

Crops may be sown 3 months after using XERTON. Ploughing to a minimum depth of 15 cm should precede preparation of a new seed bed.

- Use tank mixes or sequences of effective herbicides with different modes of action within individual crops, or successive crops.
- Apply pre-emergence of weeds wherever possible. If applications are delayed, apply post-emergence products/mixtures to small, actively growing weeds, especially where high levels of resistance are suspected and to reduce the risk of resistance development.
- Monitor fields regularly and investigate the reasons for any poor control.

Strains of some annual grasses (e.g. Black-grass, Wild-oats and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

COMPATIBILITY

For information on tank mixes, please consult the UPL website: www.upleurope.com.

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable; however, as we cannot exercise control over their storage, handling, mixing or use, or the weather conditions before, during and after application which may affect the performance of the goods, 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 or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. Our staff or agents cannot vary these conditions whether or not they supervise or assist in the use of such goods. XERTON is a registered trademark of UPL Europe Ltd. Other brand names used in this guide are trademarks of other manufacturers for which propriety rights may exist.

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Identification of the product

Product code HBX02
Product Description XERTON
Synonyms Xerton
Pure substance/preparation Preparation

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use Herbicide

1.3 Details of the Supplier of the Safety Data Sheet

Supplier UPL Europe Ltd
The Centre
Birchwood Park
Warrington
WA3 6YN
Cheshire, UK
Tel.: +44 (0) 1925 819999
Fax: +44 (0) 1925 856075
info.uk@uniphos.com

E-mail address

1.4 Emergency Telephone Number

Emergency telephone number (CARECHEM 24): +44 (0) 1235 239670

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Human Health Skin sensitization Category 1 - H317

Environment Chronic aquatic toxicity Category 3 - H412

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]



Signal Word

WARNING

Hazard Statements

H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements - EU (528, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves.
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap.
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
P501 - Dispose of contents/ container in accordance with national regulation.

EU Specific Hazard Statements

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical name	EC No	CAS-No	Weight %	Classification (Dir.67/548)	EU - GHS Substance Classification	REACH No.
Ethofumesate	247-525-3	26225-79-6	30 - 40	-	Aquatic Chronic 2 (H411)	no data available
Ethylene glycol	203-473-3	107-21-1	5 - 10	-	Acute Tox. 4 (H302)	no data available
Fatty Alcohol Ethxylate	-	68131-39-5	1 - 5	-	Eye Dam. 1 (H318) Acute Tox. 4 (H302) Aquatic Acute 1 (H400)	no data available
Tributyl phosphate	204-800-2	126-73-8	< 1	-	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Carc. 2 (H351)	no data available
1,2-Benzisothiazolin-3-o ne	220-120-9	2634-33-5	< 1	-	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)	no data available

For the full text of the H-Statements mentioned in this Section, see Section 16

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General advice

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Eye contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin contact If eye irritation persists, consult a specialist. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Ingestion Do NOT induce vomiting. Clean mouth with water.

Inhalation Call a POISON CENTER or doctor/physician if exposed or you feel unwell. Move to fresh air. Call a POISON CENTER or doctor if you feel unwell.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Water spray.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Special Hazard

Burning produces obnoxious and toxic fumes.

5.3 Advice for Firefighters

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Avoid contact with skin and eyes.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Handling

Provide adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location.

Hygiene Measures

Avoid contact with skin and eyes. Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of the reach of children.

Keep only in the original container/package in a cool well-ventilated place.

7.3 Specific end uses

No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Exposure Limits Apply technical measures to comply with the occupational exposure limits.

Chemical name	Eu	United Kingdom	France	Spain	Germany
Ethylene glycol	5* TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³	STEL: 40 ppm STEL: 104 mg/m ³ STEL: 30 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ TWA: 10 mg/m ³ Skin	TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³	5* STEL: 40 ppm STEL: 104 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³	MAK: 10 ppm MAK: 26 mg/m ³ Ceiling / Peak: 20 ppm Ceiling / Peak: 52 mg/m ³ Skin TWA: 10 ppm TWA: 26 mg/m ³
Tributyl phosphate		STEL: 5 mg/m ³ TWA: 5 mg/m ³	TWA: 0.2 ppm TWA: 2.5 mg/m ³	TWA: 0.2 ppm TWA: 2.2 mg/m ³	MAK: 1 ppm MAK: 11 mg/m ³ Ceiling / Peak: 44 mg/m ³ Skin
Component Ethylene glycol 107-21-1 (5 - 10)	Italy TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Skin	Portugal Ceiling: 100 mg/m ³	Netherlands Skin STEL: 104 mg/m ³ TWA: 52 mg/m ³ TWA: 10 mg/m ³	Finland TWA: 20 ppm TWA: 50 mg/m ³ STEL: 40 ppm STEL: 100 mg/m ³ Skin	Denmark TWA: 10 ppm TWA: 11 mg/m ³ TWA: 10 mg/m ³ Skin
Tributyl phosphate 126-73-8 (< 1)		TWA: 0.2 ppm	TWA: 0.2 ppm TWA: 2.5 mg/m ³ STEL: 0.4 ppm STEL: 5 mg/m ³	TWA: 0.2 ppm TWA: 2.5 mg/m ³	

Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethylene glycol	Skin STEL 20 ppm STEL 52 mg/m ³ TWA: 10 ppm TWA: 26 mg/m ³	Skin STEL: 20 ppm STEL: 52 mg/m ³ TWA: 10 ppm TWA: 26 mg/m ³	STEL: 50 mg/m ³ TWA: 15 mg/m ³	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ Skin Ceiling: 25 ppm STEL: 104 mg/m ³ STEL: 40 ppm	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Skin
Tributyl phosphate	Skin STEL 5 mg/m ³ TWA: 2.5 mg/m ³	Skin STEL: 0.4 ppm STEL: 5 mg/m ³ TWA: 0.2 ppm TWA: 2.5 mg/m ³		TWA: 0.2 ppm TWA: 2.5 mg/m ³ STEL: 0.6 ppm STEL: 5 mg/m ³	TWA: 0.2 ppm
Component Tributyl phosphate 126-73-8 (< 1)	Italy (ACGIH) 70 % of baseline red blood cells discretionary Cholinesterase activity Nonspecific	Portugal	Netherlands	Finland	Denmark

Derived No Effect Level (DNEL)
Predicted No Effect Concentration (PNEC)

No information available.
No information available.

8.2 Exposure Controls

Engineering controls
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye protection
Safety glasses with side-shields.
Skin protection
Long sleeved clothing.
Hand protection
Protective gloves.
Respiratory protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Environmental exposure controls
No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance
yellow-orange, white
Physical state
Liquid
suspension concentrate (SC)
characteristic
Odor
Property
pH
8.7
Melting point/freezing point
No information available
Boiling Point/Range
No information available
Flash Point
> 110 °C
Flammability (solid, gas)
Not applied
Surface tension
38.5 mN/m
Specific gravity
1.11 kg/L
Solubility in Other Solvents
No information available
Partition coefficient: n-octanol/water
No information available
Autoignition temperature
No information available
Decomposition temperature
No information available

VALUES
8.7
Remarks / Method
(1% aq)

Viscosity
228 mPas
Oxidizing properties
Non oxidizing
Explosive properties
According to the chemical structure no explosion reaction is expected

9.2 Other information

VOC Content
No information available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible Materials

Acids
Strong oxidizing agents

10.6 Hazardous Decomposition Products

Burning produces obnoxious and toxic fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute toxicity

Local effects
Inhalation
There is no data available for this product.
Eye contact
No eye irritation.
Skin contact
No skin irritation.
Ingestion
There is no data available for this product.

LD50 Oral
> 2000 mg/kg (rat)
LD50 Dermal
> 4000 mg/kg (rat)

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethofumesate 26225-79-6	> 2000 mg/kg (rat)	> 2000 mg/kg (Rat)	> 0.16 mg/L (Rat) 4 h, whole body
Ethylene glycol 107-21-1	= 4000 mg/kg (Rat)		
Tributyl phosphate 126-73-8	= 3 g/kg (Rat)	> 3100 mg/kg (Rabbit)	= 28 g/m3 (Rat) 1 h

Chronic toxicity

Skin Corrosion/Irritation
No information available.
Sensitization
May cause sensitization by skin contact.
Carcinogenic effects
No information available.
Mutagenic effects
No information available.
Reproductive effects
No information available.
STOT - Single Exposure
No information available.
STOT - Repeated Exposure
No information available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

EC50/72h/algae = 171 mg/L
EC50/48h/daphnia = 47 mg/L
LC50/fish/96 h = > 28.8 mg/L

12.2 Persistence and Degradability

No information available.

12.3 Bioaccumulative Potential

No information available.

Chemical name	Log Pow
Ethofumesate	2.7
Ethylene glycol	-1.93
Tributyl phosphate	2.5
1,2-Benzisothiazolin-3-one	1.3

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB Assessment

No information available.

12.6 Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste from Residues/Unused Products
Dispose of in accordance with local regulations.
Contaminated packaging
Empty containers should be taken for local recycling, recovery or waste disposal.
EWC waste disposal No OTHER INFORMATION
020108 - agrochemical waste containing dangerous substances.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

14. TRANSPORT INFORMATION

ADR/RID
14.1 UN-No
Not regulated
14.2 Proper shipping name
14.3 Hazard class
14.4 Packing group
14.5 Environmental Hazard
14.6 Special Provisions

IMDG/IMO
14.1 UN-No
Not regulated
14.2 Proper shipping name
14.3 Hazard class
14.4 Packing group
14.5 Environmental Hazard
14.6 Special Provisions

IATA/ICAO
14.1 UN-No
Not regulated
14.2 Proper shipping name
14.3 Hazard class
14.4 Packing group
14.5 Environmental Hazard
14.6 Special Provisions

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

- To avoid risks to man and the environment, comply with the instructions for use

International Inventories

TSCA
Complies
EINECS/ELINCS
Complies
DSL/NDSL
Complies
PICCS
Complies
ENCS
Complies
China
-
AICS
Complies
KECL
Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H351 - Suspected of causing cancer
H400 - Very toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Revision date
20-Mar-2017
Revision note
Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information contained is based on our knowledge of the product at the date of publishing. It applies to the PRODUCT AS SUCH. In case of formulation or mixture, make sure that a new danger will not appear. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and duplicated for prevention and Safety purposes. For rates and use recommendations, refer to the information displayed on the packaging. It is the responsibility of the handlers of the product to pass on this safety data sheet to any subsequent persons who will come into contact with the product.



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A1.0.XERTON IE 220217.NoA.05702

XER/IE/SL/F/0417/UPL

April 2017

5 Litres
417 g/l ETHOFUMESATE

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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).

**SHAKE WELL BEFORE USE
PROTECT FROM FROST**

For Batch Number and
Manufacturing Date see container.

UPL Europe Ltd
The Centre, 1st Floor, Birchwood Park, Warrington, WA3 6YN, UK
Telephone: +44 (0)1925 819999 **Fax:** +44 (0)1925 856075

For 24 hour emergency information contact:
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