

EPHON TOP



MAPP 18872

A soluble concentrate containing 660 g/L (51.8% w/w) ethephon (2-chloroethylphosphonic acid) for use as a growth regulator in winter and spring barley and winter and spring wheat, durum wheat, rye, spelt and triticale. Ethephon is an organophosphate. Handle with care.

HAZARD



May be corrosive to metals.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
Toxic to aquatic life with long lasting effects.

Do not breathe dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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.

Corrosive to the respiratory tract.

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

SAFETY PRECAUTIONS

Operator Protection

This product contains an anticholinesterase organophosphorus compound and must not be used by those under medical advice NOT to work with such compounds.

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

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

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

Environmental Protection

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.

Storage and disposal

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

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.

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

PROTECT FROM FROST

Nufarm UK Limited
Wyke Lane, Wyke, Bradford, West Yorkshire
BD12 9EJ
United Kingdom

Technical Helpline telephone number 01274 694714
24-hour emergency telephone number 01274 696603

5 Litres e

 This label is compliant with the CPA Voluntary Initiative Guidance.
510009367 0220

 **Nufarm**
Grow a better tomorrow

**IMPORTANT INFORMATION
FOR USE ONLY AS A PROFESSIONAL PLANT GROWTH REGULATOR**

Crops	Maximum Individual Dose (L product/ha)	Maximum Total Dose (L product/ha)	Latest Time of Application
Winter Barley	0.75	0.75	Before 1st spikelet of inflorescence just visible stage (GS 49)
Winter & Spring Wheat	0.75	0.75	Before 1st spikelet of inflorescence just visible stage (GS 49)
Triticale	0.75	0.75	Before 1st spikelet of inflorescence just visible stage (GS 49)
Rye	1.1	1.1	Before 1st spikelet of inflorescence just visible stage (GS 49)
Spring Barley	0.5	0.5	Before 1st spikelet of inflorescence just visible stage (GS 49)
Durum Wheat	0.75	0.75	Before 1st spikelet of inflorescence just visible stage (GS 49)
Spelt	0.6	0.6	Before flag leaf sheath swollen stage (GS45)

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.

RESTRICTIONS

- Stress factors reduce crop growth and may also lead to secondary tillering and small grains. The use of EPHON TOP under stress conditions may lead to these effects being more pronounced, especially on spring barley.
- Cereals can be susceptible to drought stress. Do not spray when the soil is very dry
- Do not use within 10 days of any herbicide or liquid fertilizer treatment.
- Do not spray crops heavily diseased or suffering from pest damage, nutrient deficiency or herbicide stress.
- Do not spray during cold weather or periods of night frost.
- Do not spray where crop is wet or rain is imminent.
- Avoid overlapping spray bouts.
- Avoid drift of spray to adjoining crops.

PROBLEM CONTROLLED

The use of EPHON TOP on winter and spring barley and (durum) wheat as well as winter varieties of rye and triticale and spelt can help reduce straw length and give greater resistance to lodging and aid harvesting. The full benefit of EPHON TOP treatment will only be obtained on crops which have received adequate inputs e.g. fertilizer and fungicides).

The best response to EPHON TOP is obtained when the crop is growing vigorously. Apply EPHON TOP before lodging has started. It is recommended that only crops grown under conditions of high fertility and, therefore, at risk from lodging, should be treated with EPHON TOP. Thin crops and particularly those on soils of low fertility are less likely to lodge, and in addition such crops of winter wheat may ripen prematurely.

CROP SPECIFIC INFORMATION

Use on winter and spring varieties of barley and wheat (including durum wheat) and on winter varieties of rye and triticale and spelt.

Only crops which have been drilled early, have a high yield potential and are likely to suffer severe lodging should be treated with EPHON TOP. Crops suffering from stress or likely to be stressed, for example due to soil conditions, should not be treated (see RESTRICTIONS section).

WINTER BARLEY

Application Rate:	0.75 L product/ha
Maximum Total Dose:	0.75 L product/ha
Application Timing:	EPHON TOP can be applied to winter barley from the first node detectable stage (GS 31) up to and including the first awns just visible stage (GS 49).
High Lodging Risk Crops:	For the greatest resistance to lodging use a sequential treatment of an approved formulation containing chlormequat followed by EPHON TOP.
Water Volume:	100 – 400 L water/ha

WINTER & SPRING WHEAT

Application Rate:	0.75 L product/ha
Maximum Total Dose:	0.75 L product/ha
Application Timing:	EPHON TOP can be applied to winter and spring wheat from the first node detectable stage (GS 31) up to and including the first awns just visible stage (GS 49).
Water Volume:	100 – 400 L water/ha

TRITICALE

Application Rate:	0.75 product/ha
Maximum Total Dose:	0.75 product/ha
Application Timing:	EPHON TOP can be applied to triticale from the first node detectable stage (GS 31) up to and including the first awns just visible stage (GS 49). The best control of lodging will be given if the crop has received prior treatment with chlormequat at the recommended timing.
Water Volume:	100 – 400 L water/ha

RYE

Application Rate:	1.1 L product/ha
Maximum Total Dose:	1.1 L product/ha
Application Timing:	EPHON TOP can be applied to winter rye from the first node detectable stage (GS 31) up to and including the first awns just visible stage (GS 49). Crops of winter rye which have received prior treatment with approved chlormequat products may be treated with EPHON TOP from the flag leaf just visible stage (GS 37) up to and including the first awns just visible stage (GS 49).
Water Volume:	100 – 400 L water/ha

SPRING BARLEY:

Application Rate:	0.5 L product/ha
Maximum Total Dose:	0.5 L product/ha
Application Timing:	EPHON TOP can be applied to spring barley from the first node detectable stage (GS 31) up to and including the first awns just visible stage (GS 49).
Water Volume:	100 – 400 L water/ha

DURUM WHEAT

Application Rate:	0.75 L product/ha
Maximum Total Dose:	0.75 L product/ha
Application Timing:	EPHON TOP can be applied to spring durum wheat from the first node detectable stage (GS 31) up to and including the first awns just visible stage (GS 49).
Water Volume:	100 – 400 L water/ha

SPELT

Application Rate:	0.6 L product/ha
Maximum Total Dose:	0.6 L product/ha
Application Timing:	EPHON TOP can be applied to spelt from the first node detectable stage (GS 31) up to and including the flag leaf sheet swollen (GS 45).
Water Volume:	100 – 400 L water/ha

MIXING AND SPRAYING

Mixing

Add the appropriate amount of EPHON TOP to clean water in a half-filled sprayer tank. Start agitation and when mixed thoroughly add the remainder of the water. Continue agitation during the completion of filling. Spray immediately after mixing.

Spraying

Before spraying ensure that the sprayer is clean and in good working order. Check all hoses, filters and nozzles. Calibrate according to the sprayer manufacturer's recommendations and ensure that the sprayer is adjusted to give adequate and even coverage of the top leaves.

Apply through a conventional field crop sprayer using medium nozzles at a pressure of 2-3 bar. Good spray coverage is essential.

Spray quality: EPHON TOP plant growth regulator should be applied as a **MEDIUM** spray (BCPC category).
Water volume 200-400 L/ha

EPHON TOP may also be applied in a reduced water volume of 100 litres/ha as a **FINE** spray (BCPC category) provided suitable spray nozzles are selected for this operation.

TANK CLEANING INSTRUCTIONS

After use, drain the sprayer, wash thoroughly with water and liquid detergent and spray out completely.

Ensure that all liquid is removed from the sprayer tank, pump and hoses and ensure nozzles and nozzle filters are clean.

Remove nozzles, open tank and drain pump to allow free access of air to all parts.

COMPANY ADVISORY INFORMATION

This section is not part of the Product Label under the Plant Protection Products Regulations 2011. It provides additional advice on product use at the discretion of the applicant.

TERMS AND CONDITIONS OF SUPPLY, SALE OR USE

All goods supplied by Nufarm are high grade and we believe them to be suitable for the purpose for which we expressly supply them: but as we cannot exercise any control over their mixing, use or 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 our Associate Companies for any damage or injury whatsoever arising from their storage, handling, re-application or use. These conditions cannot be varied by our staff, our agents or the re-sellers of the product whether or not they supervise or assist in the use of such goods.

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

CA Code (Nufarm) : 3147
Oracle Recipe Code (Nufarm) : 610000243
Item codes : 110003640
Product form : Mixture
Trade name : Ephon-Top
Type (Nufarm) : Country Specific
Country (Nufarm) : United Kingdom

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Plant protection

Use of the substance/mixture :

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor
Nufarm UK Limited
Wyke Lane
Wyke
BD12 9EJ Bradford - UK
T +44 (0)1274 691234 - F +44 (0)1274691176
infouk@uk.nufarm.com

1.4. Emergency telephone number

Emergency number : +44 (0)1274 696603

2. Hazards identification

2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1 H290
Acute toxicity (dermal), Category 4 H312
Skin corrosion/irritation, Category 1B H314

Specific target organ toxicity — Single exposure, Category 3,
Respiratory tract irritation H335

Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05



GHS07



GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H290 - May be corrosive to metals.
H312 - Harmful in contact with skin.
H314 - Causes severe skin burns and eye damage.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P234 - Keep only in original container.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth.

Do NOT induce vomiting.
P303+P361+P353- IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH071 - Corrosive to the respiratory tract.
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

EUH-statements :

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

3. Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethephon; 2-chloroethyl-phosphonic acid	(CAS-No.) 16672-87-0 (EC-No.) 240-718-3 (EC-Index-No.) 015-154-00-4	51.8	Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

4. First aid measures

4.1. Description of first aid measures

First-aid measures general : Remove immediately contaminated clothing.

First-aid measures after inhalation : Allow affected person to breathe fresh air. Obtain medical attention.

First-aid measures after skin contact : Wash off immediately with soap and plenty of water. Take off contaminated clothes. Call a physician.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. If eye irritation persists: Get medical advice/attention.

First-aid measures
after ingestion :

Rinse mouth. If
swallowed, seek
medical advice
immediately and show
this container or label.
Do NOT induce
vomiting.

Other information :

Contain the spreading
of extinguishing fluids
(this product may be
hazardous for the
environment).
Do not discharge
into drains or the
environment.

**4.2. Most important symptoms and effects, both
acute and delayed**
Symptoms/effects :

Gastric perforation.
Gastrointestinal
complaints.

**4.3. Indication of any immediate medical
attention and special treatment needed**
Treat symptomatically.

5. Firefighting measures

5.1. Extinguishing media

Suitable
extinguishing media :

Water spray. Dry
powder. Sand. Foam.
Carbon dioxide.

Unsuitable
extinguishing media :

high volume water jet.

**5.2. Special hazards arising from the substance
or mixture**
Hazardous
decomposition
products in case of fire :

Hydrogen chloride.
Nitrogen oxides.
Phosphorous oxide.
Carbon monoxide.
Carbon dioxide.

5.3. Advice for firefighters
Protection
during firefighting :

Use personal
protective equipment
(PPE). Wear a self
contained breathing
apparatus.

6. Accidental release measures

**6.1. Personal precautions, protective equipment
and emergency procedures**

General measures :

Wear personal
protective equipment.
Refer to chapter 8.
Mark out the
contaminated area
with signs and prevent
access to
unauthorized
personnel.

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions

Do not allow to enter drains or water courses.

**6.3. Methods and material for containment and
cleaning up**

Methods for cleaning up :

Soak up with inert
absorbent material
(for example sand,
sawdust, a universal
binder, silica gel). Take
up mechanically
(sweeping, shovelling)
and collect in suitable
container for disposal.

Other information :

Never return spills in
original containers for
possible later re-use.

6.4. Reference to other sections

For further information refer to section 13.

7. Handling and storage

7.1. Precautions for safe handling

Precautions

for safe handling :

Wear personal protective equipment. Keep out of the reach of children. Avoid all eye and skin contact and do not breathe vapour and mist.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions :

Keep container tightly closed. Keep only in original container. Keep away from ignition sources. Store in a well-ventilated place. Store in a dry place.

Storage temperature :

< 30 °C

Information

on mixed storage :

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

None.

8. Exposure controls/personal protection

8.1. Control parameters

Additional information :

Country Specific

8.2. Exposure controls

Materials for protective clothing:

According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn. Keep away from food and drink. Wash clothing before re-using

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent)

Eye protection:

tightly fitting safety goggles. Face shield

Skin and body protection:

acid-resistant protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Other information:

Wash contaminated clothing before reuse. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product. Keep work clothing separately. Take off contaminated clothes. Handle in accordance with good industrial hygiene and safety practice. Do not inhale vapour. Avoid contact with skin and eyes.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state :

Liquid

Appearance :

Liquid.

Colour :

Colourless.

Odour :

odourless.

Odour threshold :

No data available

pH :

1.7 @ 20°C

pH solution

concentration :

1 %

Relative evaporation rate (butylacetate=1) :

No data available

Melting point :

No data available

Freezing point :

No data available

Boiling point :

No data available

Flash point :

105.5 °C

Auto-ignition temperature :

530 °C

Decomposition temperature :

> 250 °C

Flammability (solid, gas) :

Not relevant

Vapour pressure :

< 1 mPa (18 - 80°C; EtHepon)

Relative vapour density at 20 °C :

No data available

Relative density :

No data available

Density :

1.277 g/cm³

Solubility :

Water: completely miscible

Log Pow : -5.81 - 0.15
(mean value: -0.72)

Viscosity, kinematic : No data available

Viscosity, dynamic : 4.9 - 9.2 mPa·s @ 20°C

Explosive properties : Not explosive.

Oxidising properties : Non oxidizing.

Explosive limits : No data available

9.2. Other information

No additional information available

10. Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Reacts with (some) metals.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Aluminium and its alloys.

10.6. Hazardous decomposition products

Hydrocarbons. Hydrogen chloride, anhydrous.

11. Toxicological information

11.1. Information on toxicological effects

Ephon-Top	
LD50 oral rat	3022 mg/kg (calculated value)
LD50 dermal rat	1902 mg/kg (calculated value)
LC50 inhalation rat (mg/l)	6.3 mg/l (calculated value)
ATE CLP (vapours)	6.3 mg/l/4h
ATE CLP (dust,mist)	6.3 mg/l/4h

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Dermal: Harmful in contact with skin.

Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Skin irritation
pH: 1.7 @ 20°C

Additional information : rabbit ethephon;
2-chloroethylphosphonic acid

Serious eye damage/irritation : Serious eye damage,
category 1, implicit
pH: 1.7 @ 20°C

Additional information : Causes eye irritation

Respiratory or skin sensitisation : Not classified (Did not
cause sensitisation)

Additional information : Guinea pig ethephon;
2-chloroethylphosphonic acid

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory
irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

12. Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, shortterm (acute) : Not classified

Hazardous to the aquatic environment, longterm (chronic) : Toxic to aquatic life with long lasting effects.

Ephon-Top	
LC50 96h fish	123.6 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 48h crustacea	> 85 mg/l Daphnia magna
NOEC chronic fish	43 mg/l Pimephales promelas (Fathead Minnow)

Ephon-Top

NOEC chronic crustacea	67 mg/l Daphnia magna (Water flea)
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Additional ecotoxicological information

Toxicity to algae:

LC50 *Chlorella vulgaris*

Dose: 20.9 mg/L

Exposition time: 72 h

LC50 *Selenastrum capricornutum*

Dose: > 1.4 mg/L

Exposition time: 120 h

LC50 *Anabaena flos-aquae*

Dose: > 1.8 mg/L

Exposition time: 120 h

LC50 *Naviculla pelliculosa*

Dose: > 1.5 mg/L

Exposition time: 120 h

EC50 *Lemna gibba*

Dose: > 1.6 mg/L

Exposition time: 14 d

2.2. Persistence and degradability

Ephon-Top

Persistence and degradability	Not readily biodegradable. Ethepon; 2-chloroethylphosphonic acid.
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2.3. Bioaccumulative potential

Ephon-Top

Log Pow	-5.81 - 0.15 (mean value: -0.72)
Bioaccumulative potential	Bioaccumulation unlikely.

2.4. Mobility in soil

Ephon-Top

Koc	2540 L/kg (Ethepon)
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12.5. Results of PBT and vPvB assessment

Ephon-Top

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : Harmful to aquatic organisms.

13. Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose as hazardous waste. Dispose of at authorized waste collection point. Do not remove as household garbage. Must follow special treatment according to local regulation.

Product/Packaging

disposal recommendations : Do not re-use empty containers. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

European List

of Waste (LoW) code :

02 01 08* - agrochemical waste containing dangerous substances

14. Transport information

in accordance with ADR / RID / IMDG / IATA / ADN

ADR		IMDG	IATA
14.1. UN number			
3265		3265	3265
14.2. UN proper shipping name			
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethephon)		CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethephon)	Corrosive liquid, acidic, organic, n.o.s. (Ethephon)
Transport document description (ADR)			
UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethephon), 8, III, (E), ENVIRONMENTALLY HAZARDOUS		UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethephon), 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (Ethephon), 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)			
8		8	8
 		 	 
14.4. Packing group			
III		III	III
14.5. Environmental hazards			
Dangerous for the environment : Yes		Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available			
14.6. Special precautions for user			
Overland transport		Portable tank and bulk container	
Classification code (ADR) :	C3	special provisions (ADR) :	TPI, TP28
Special provisions (ADR) :	274	Tank code (ADR) :	L4BN
Limited quantities (ADR) :	5I	Vehicle for tank carriage:	AT
Excepted quantities (ADR) :	EI	Transport category (ADR) :	3
Packing instructions (ADR) :	P001, IBC03, LP01, R001	Special provisions for carriage - Packages (ADR) :	VI2
Mixed packing provisions (ADR) :	MP19	Hazard identification number (Kemler No.) :	80
Portable tank and bulk container instructions (ADR) :	T7		

Orange plates:

80
3265

Tunnel restriction code (ADR): E
EAC code : 2X
APP code : B

Transport by sea

Special provisions (IMDG) : 223, 274
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
BC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TPI, TP28
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW2
Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y841
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 852
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 856
CAO max net quantity (IATA) : 60L

Special provisions (IATA) : A3, A803
ERG code (IATA) : 8L

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Other information, restriction and prohibition regulations : WGK Germany: 2 - Hazard to waters.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

None

16. Other information

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

EPHON TOP



MAPP 18872

A soluble concentrate containing 660 g/L (51.8% w/w) ethephon (2-chloroethylphosphonic acid) for use as a growth regulator in winter and spring barley and winter and spring wheat, durum wheat, rye, spelt and triticale. Ethephon is an organophosphate. Handle with care.

! DANGER

May be corrosive to metals.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
Toxic to aquatic life with long lasting effects.



Do not breathe dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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.

Corrosive to the respiratory tract.

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

SAFETY PRECAUTIONS

Operator Protection

This product contains an anticholinesterase organophosphorus compound and must not be used by those under medical advice NOT to work with such compounds.

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

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

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

Environmental Protection

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.

Storage and disposal

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

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.

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

PROTECT FROM FROST

Nufarm UK Limited
Wyke Lane, Wyke, Bradford, West Yorkshire
BD12 9EJ
United Kingdom

Technical Helpline telephone number 01274 694714
24-hour emergency telephone number 01274 696603

5 Litres e

 This label is compliant with the CPA Voluntary Initiative Guidance.
510009367 0220

 **Nufarm**
Grow a better tomorrow



CLIENT
 NUFARM UK

REFERENCE
 EPHON-TOP (UK) - xxxx

ORDER N° 00507009-001-000

BARCODE N° -

CSR Rachel Bonnefon

OPERATOR BLA

PROOF / DATE APPROVAL 5 - 13-MAR-20

CYAN

MAJENTA

YELLOW

Black

UNIT SIZE 150 x 160 / 140 x 127 mm

INK NUMBER 4

SH2

DEVELOPMENT

PLATE

SCREEN RULING -

PRINTING SENS Normal



PLAN

FOR APPROVAL Please verify this proof carefully concerning lay-out, size, texts and barcode. For the Pantone® colours please refer to the latest Pantone® colour guide. After your approval on the above we can proceed to the next stage of your project. Please valid this proof by signature and send it back to us.
 Thank you.

CLIENT SIGNATURE

Date: _____