

AGRITOX®

A soluble concentrate containing 500 g/L (44.25% w/w) MCPA as the dimethylamine salt.

A selective herbicide for the control of many broad-leaved weeds in grassland.

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

Crops	Maximum individual dose	Maximum total dose	Latest timing
Grassland	2.7 L/ha	5.4 L product/ha/year	N/A
Grassland (seed crop)	2.7 L/ha	2.7 L product/ha/year	5 weeks before heading

Other specific restrictions:

Do not apply by hand-held equipment.

This product must not be applied between the end of September and beginning of March

Do not apply in volumes less than 200 litres of water per hectare

Additional Safety Phrases:

- To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies
- Direct spray away from water
- Extreme care must be taken to avoid spray drift onto non-crop plants outside the target area
- Livestock must be kept out of treated areas until poisonous weeds such as ragwort have died and become unpalatable
- 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).
- DO NOT Apply if rain is forecast within 48 hours.
- DO NOT Apply to saturated soils

10 Litres e

PROTECT FROM FROST.
FOR PROFESSIONAL USE ONLY.

B0909-007 0116

Safety Information



DANGER

Harmful if swallowed.
Causes serious eye damage.

Wash hands thoroughly after handling.

Do not eat drink or smoke when using this product.

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

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

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 triple rinsed 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 No. 05498

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

Technical helpline telephone number: +44 (0)1274 694714.

24-hour emergency telephone number: +44 (0)1274 696603.



Grow a better tomorrow.

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

- DO NOT roll or harrow within a week of spraying.
- DO NOT mow within four days of application.
- DO NOT treat newly established grass less than one year old.
- DO NOT treat grass suffering from drought, disease, during freezing conditions when rain is imminent or other adverse factors.
- Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area
- DO NOT spray in windy weather, avoid drift on to neighbouring crops, especially beans, beet, brassicas, carrots, legumes, lettuce and tomatoes which are very susceptible.
- WASH EQUIPMENT thoroughly immediately after use. Rinse with water three times, drain and allow to dry. Traces of herbicide left in the sprayer may damage susceptible crops if these are subsequently sprayed using the same equipment.
- Do not apply in volumes less than 200 litres of water per hectare

WEEDS CONTROLLED

Established Grassland and Grass seed crop

Susceptibility	Weed Species	Timing
Susceptible (Consistently good control of both roots and shoots)	Greater Plantain	
	Ribwort Plantain	
Moderately Susceptible (Weeds suppressed and top-growth usually killed)	Buttercup, Meadow	Treat in spring or early summer
	Cat's Ear	
	Cress, Hoary	
	Daisy, Common	
	Hawkbit, Autumn	
	Knapweed, Common	
	Ragwort, Common	Spray in spring when in rosette stage before flower spike starts to grow
	Rush, Compact	Spray in April to June. Cut and remove stems either four weeks before or after treatment.
	Rush, Soft	Treat as Compact Rush
	Self-Heal	
	Thistle, Creeping	
Moderately Resistant (Top growth only may be killed)	Thistle, Spear	
	Buttercup, Bulbous	Treat in autumn on new leaf or in spring
	Buttercup, Creeping	Treat in spring or early summer
	Colt's Foot	
	Dandelion	
	Meadowsweet	
	Rush, Hard	Treat as Compact Rush
	Sorrel, Common	
	Sorrel, Sheep's	
	Thistle, Dwarf	
	Yarrow	

CROP SPECIFIC INFORMATION

Always spray when the crop is actively growing.

Grassland

Application rate: 2.7 L product/ha
Maximum total dose: 5.4 L product/ha

Use on established grassland and leys not less than 1 year old. Apply AGRITOX in spring and summer when growing conditions are favorable. Spray grass for hay or silage 3-4 weeks before cutting. Clover may be checked but recovers by the following spring. Follow-up applications may also be needed where new seedling weeds appear. An interval of 4-6 weeks should elapse between successive applications if weeds persist.

A top dressing ten days before treatment is recommended to assist kill of weeds and subsequent recovery of the sward. Annual weed species will be best controlled if spraying is done while the majority of weeds are seedlings. Perennial weeds should be sprayed during their period of maximum growth, usually when the flower buds are beginning to form. The response of perennial weeds to treatments are often variable with only the aerial parts killed, though often suppression will occur. The recovery of the weeds will be reduced if the grass is growing vigorously at the time of treatment

Apply in 200 - 400 L water/ha.

Grassland (seed crops)

Application rate: 2.7 L product/ha
Maximum total dose: 2.7 L product/ha

The safe period for treatment occurs when the grasses have at least four leaves and have begun to tiller but at least five weeks preceding ear emergence. The best time varies according to the species and strain of grass concerned. Do not apply more than 2.7 L/ha of AGRITOX.

Apply in 200 - 400 L water/ha.

MIXING AND SPRAYING

Half-fill the tank with clean water and add the required quantity of AGRITOX, and add the remainder of the clean water with gently agitation which should continue until the contents are thoroughly mixed. Triple rinse containers with water and add washing to the spray tank. Spray using a MEDIUM/COARSE spray (BCPC).

TANK CLEANING

WASH EQUIPMENT thoroughly immediately after use. Rinse with water three times, drain and allow to dry. Traces of herbicide left in the sprayer may damage susceptible crops if these are subsequently sprayed using the same equipment.

COMPATIBILITY

AGRITOX can be tank-mixed with other pesticides, please consult your Nufarm distributor or Nufarm UK Limited.

RESISTANCE MANAGEMENT

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered to be resistant to a herbicide if it survives a correctly applied treatment at the recommended dose. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures.

ACKNOWLEDGMENTS

®Agritox is the registered trademark of Nufarm UK Limited.

TERMS AND CONDITIONS OF SUPPLY, SALE OR USE

All goods supplied by Nufarm UK Ltd. 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

Trade name: Agritox

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

Use: Herbicide

1.3. Details of the supplier of the safety data sheet

Nufarm UK Limited, Wyke Lane, Wyke, Bradford, West Yorkshire BD12 9EJ United Kingdom
Telephone: +44 (0)1274 691234 Telefax: +44 (0)1274 691176 E-mail address: infouk@uk.nufarm.com

1.4 Emergency telephone number: +44 (0)1274 696603

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

EEC/99/45:	Xi	R37 - Irritating to respiratory system.
	Xn	R22 - Harmful if swallowed.
	N	R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
EG_1272/08:	AcuteTox.4	H302 - Harmful if swallowed.
	EyeDam.1	H318 - Causes serious eye damage.

2.2. Label elements

according directive 1999/45/EG

Pictogram:



Xn



N

R22	- Harmful if swallowed.
R41	- Risk of serious damage to eyes.
R37	- Irritating to respiratory system.
R50/53	- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S 2	- Keep out of the reach of children.
S13	- Keep away from food, drink and animal feedingstuffs.
S26	- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39	- Wear eye/face protection.
S46	- If swallowed, seek medical advice immediately and show this container or label.
S57	- Use appropriate container to avoid environmental contamination.
S35	- This material and its container must be disposed of in a safe way.

REGULATION (EC) No 1272/2008

Pictogram:



GHS05



GHS07

Signal word: Danger

H302	- Harmful if swallowed.
H318	- Causes serious eye damage.
P264	- Wash hands thoroughly after handling.
P270	- Do not eat, drink or smoke when using this product.
P280	- Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312	- IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P330	- Rinse mouth.
P305 + P351 + P338	- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	- 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.

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Aqueous solution of the dimethylammonium salt Contains MCPA 500g/l

3.2. Mixtures

Components:

MCPA		
CAS-No.:	84-74-6	
EINECS-No. / ELINCS No.:	202-360-6	
REACH No.:		
Concentration:	44.25 % (w/w)	
Classification:		
EG_1272/08:	AcuteTox.4	H302 - Harmful if swallowed.
	SkinIrrit.2	H315 - Causes skin irritation.
	EyeDam.1	H318 - Causes serious eye damage.
	AquaticAcute1	H400 - Very toxic to aquatic life.
	AquaticChronic1	H410 - Very toxic to aquatic life with long lasting effects
EEC/67/548:	Xn	R22 - Harmful if swallowed.
	Xi	R38 - Irritating to skin.
	Xi	R41 - Risk of serious damage to eyes.
	N	R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
4-chloro-o-cresol		
CAS-No.:	1570-64-5	
EINECS-No. / ELINCS No.:	216-381-3	
REACH No.:	01-2119455846-26	
Concentration:	0.1 % (w/w)	
Classification:		
EG_1272/08:	AcuteTox.3	H331 - Toxic if inhaled.
	SkinCorr.1A	H314 - Causes severe skin burns and eye damage.
AquaticAcute1		H400 - Very toxic to aquatic life.
EEC/67/548:	T	R23 - Toxic by inhalation.
	C	R35 - Causes severe burns.
	N	R50 - Very toxic to aquatic organisms.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin contact:

Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. If symptoms persist, call a physician. Wash contaminated clothing before re-use.

Inhalation:

Move to fresh air. If symptoms persist, call a physician.

Ingestion:

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

4.2. Most important symptoms and effects, both acute and delayed

Hazards: No information available.

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

Treatment: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water spray, Dry powder, Sand, Foam, Carbon dioxide (CO₂)
Extinguishing media which shall not be used for safety reasons: High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during fire fighting: In the event of fire (HCl, Cl₂, NO_x, CO) may be formed.

5.3. Advice for firefighters

Special protective equipment for fire-fighters: Use personal protective equipment. In the event of fire, wear self-contained breathing apparatus.

Further Information: Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. (see Chapter 8)

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Shovel into suitable container for disposal.

Additional advice: Never return spills in original containers for re-use.

6.4. Reference to other sections

see Chapter 13

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Wear personal protective equipment. Do not breathe vapours or spray mist.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Store at room temperature in the original container. Advice on common storage: Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end uses

none

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters (EH40/2005 Workplace exposure limits)

Components: MCPA

CAS-No.: 94-74-6

National occupational exposure limits: -

Note: no classification available, not listed in EH40/2005

Components: 4-chloro-o-cresol

CAS-No.: 1570-64-5

National occupational exposure limits: -

Note: not listed in EH40/2005, no classification available

8.2. Exposure controls

Personal protective equipment

Hand protection: PVC or nitrile-rubber gloves

Eye protection: Safety glasses, or, Goggles

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Physical state:

Form:

Colour:

Odour:

Start of crystallisation:

Boiling point/boiling range:

Flash point:

Ignition temperature:

Explosivity:

Upper explosion limit:

Lower explosion limit:

Vapour pressure:

Density:

Water solubility:

pH:

Partition coefficient:

n-octanol/water:

liquid at 20 °C,

Soluble concentrate

amber

brown

amine-like

ca.0 °C

ca.100 °C at 1.013 hPa Aqueous solution

> 110 °C Method: ENVDIN 22719

420 °C

Not explosive

no data available

no data available

Active ingredient is an organic salt. Vapour pressure is negligibly low.

ca.1.13 g/cm³ at 20 °C

completely miscible

6.4

log POW = 0.59 at 25 °C

(MCPA), (pH 5)

log POW = -0.71 at 25 °C

(MCPA), (pH 7)

9.2. Other information

none

10. STABILITY AND REACTIVITY

10.1. Reactivity

no data available

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

No dangerous reaction known under conditions of normal use.

10.5. Incompatible materials to avoid

Strong acids and strong bases

10.6. Hazardous decomposition products

-

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute dermal toxicity:

LD50 rat
Dose: > 2,000 mg/kg

Acute inhalation toxicity:

LC50 rat
Exposure time: 4 h
Dose: > 4.72 mg/l
rabbit

Skin irritation:

Result: No skin irritation
rabbit

Eye irritation:

Result: Severe eye irritation

Sensitisation:

Maximisation Test Guinea-pig
Result: Did not cause sensitization.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to fish:

LC50 Oncorhynchus mykiss (Rainbow trout)
Dose: 99.3 mg/l
Testing period: 96 h

Toxicity to daphnia:

EC50 Daphnia
Dose: 424 mg/l
Testing period: 48 h

Toxicity to algae:

ErC50 Toxicity to algae
Dose: 60.7 mg/l
ErC50 Lemna minor (duckweed)
Dose: 1.52 mg/l

12.2. Persistence and degradability

Biodegradability: Readily biodegradable, according to appropriate OECD test.

Stability in soil:

DT50: ca. 20 d
(MCPA)

Stability in water:

DT50: 13.5 d
(MCPA)

12.3. Persistence and degradability

Bioaccumulation: Does not bioaccumulate.

12.4. Mobility in soil

Koc = 10 - 157 (MCPA)

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects

none

13. DISPOSAL CONSIDERATIONS

According to European Directive 2000/532/EC as amended :

Waste Code: 02 01 08 (agrochemical waste containing dangerous substances)

13.1. Waste treatment methods

Product: In accordance with local and national regulations.

Contaminated packaging: Do not re-use empty containers. Dispose empty and triple rinsed container within a local disposing system according to EC directive 94/62/EC

14. TRANSPORT INFORMATION

14.1. UN number

-

14.2. Proper shipping name

not applicable

14.3. Transport hazard class(es)

ADR/RID : Not a dangerous substance as defined in the above regulations.

IMDG : Not a dangerous substance as defined in the above regulations.

IATA-DGR : Not a dangerous substance as defined in the above regulations.

14.4. Packaging group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

none

15. REGULATORY INFORMATION

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

Other regulations: The product is classified and labelled in accordance with EC directives or respective national laws.

15.2. Chemical Safety Assessment

none

16. OTHER INFORMATION

Print Date: 2014/02/04

The date format YYYY/MM/DD is used according to ISO 8601.

(Alterations are indicated in the left hand margin by: ||)

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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