

# MOST MICRO

A capsule suspension formulation containing 365 g/l Pendimethalin.

A herbicide for the control of annual grass and broad-leaved weeds in winter wheat, durum wheat, winter and spring barley, winter rye, triticale, potatoes, forage maize, grain maize and sunflowers.

## RISK AND SAFETY INFORMATION – 24 Hour Emergency Number: +44 (0)1763 212100



**MAY CAUSE AN ALLERGIC SKIN REACTION**

**HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS**

Avoid breathing spray  
Wear gloves, protective clothing and eye/face protection  
**IF ON SKIN:** Wash with plenty of soap and water  
**IF SKIN IRRITATION OR RASH OCCURS:** Get medical advice/attention.  
To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies  
Avoid release to the environment  
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  
Collect spillage

PCS Number 04837

Safety data sheet available on request

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

## FOR PROFESSIONAL USE ONLY DIRECTIONS FOR USE – FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

Crops	Maximum individual dose:	Maximum number of treatments:	Latest time of application:
Winter wheat, durum wheat, winter barley, winter rye, triticale	3.6 L/ha	1	Before leaf sheath erect stage (GS 30)
Spring barley, potatoes and sunflower	3.6 L/ha	1	Pre-crop emergence
Forage maize and grain maize (open crops and crops under plastic)	4.1 L/ha	1	Before 4th leaf stage

**READ ALL PRECAUTIONS BEFORE USE**

**Approval Holder and Marketing Company:** Sipcam UK Limited, 4C Archway House, The Lanterns, Melbourn Street, Royston SG8 7BX, UK.  
Tel: +44 (0)1763 212100. Fax: +44 (0)1763 212101.

**SIPCAM UK CONDITIONS OF SUPPLY:** All goods supplied by us are of high grade, but as we cannot exercise control over their mixing or use, all conditions and warranties, statutory or otherwise, as to the quality or fitness of our goods for any purpose, are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use.

Net contents:

**10Le**

Batch Number:

**SIPCAM U.K.**

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## 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.

A herbicide for the control of annual grass and broad-leaved weeds in a wide range of crops.

## RESTRICTIONS/WARNINGS

### Efficacy

Some soil moisture must be present for **MOST MICRO** to be activated. Best results will be obtained if rainfall occurs within seven days of application.

Residual control may be reduced:

- Under prolonged dry conditions.
- On soils with a high Kd factor.
- Where organic matter exceeds 6%.
- Where ash content is high.

Do not disturb the soil after **MOST MICRO** has been applied as this will result in reduced weed control.

Where cultural practices which encourage the build up of organic matter in the soil surface are practiced for a number of seasons the effectiveness of residual herbicides may be reduced. In such circumstances, periodic ploughing is recommended to disperse residues into a greater volume of soil.

### Soil types

**MOST MICRO** may be used on all mineral soil types.

Do not use on soils with more than 10% organic matter.

On stony or gravelly soils, crop damage could occur, particularly, if heavy rain follows treatment.

Do not use on water logged soil or soils prone to water logging.

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## Seedbed preparation

Trash and straw should be incorporated evenly during seedbed preparation.

Seedbed must have a fine, firm tilth.

Consolidate loose or cloddy seedbeds before use.

Following pre-emergence applications, unconsolidated clods (especially if larger than 7.5cm (3") diameter) may reduce the level of weed control and cause seed to be inadequately covered, which could result in crop damage.

## Crop safety

Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

Do not apply **MOST MICRO** to crops suffering from stress, which may be caused for example by pests, disease, water logging, poor seedbed conditions or previous chemical treatment.

Seed should be covered with a minimum of 3.2cm of settled soil (2.5cm for Sunflowers, 5cm for maize).

Shallow drilled crops should be treated post-emergence.

Do not soil incorporate.

Do not spray undersown crops.

Do not undersow crops treated with **MOST MICRO**.

**MOST MICRO** should not be used on protected crops, or in greenhouses.

## Other Restrictions/Warnings

Before using **MOST MICRO** on crops to be processed please consult your processor.

Concentrated or diluted **MOST MICRO** will stain. Avoid spillage.

Staining is minimised or completely removed if skin and clothes are washed immediately.

Hose down machinery immediately after use with a spray tank cleaner.

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# WEED CONTROL

## Cereals

All weed susceptibility ratings in the table below are for applications made pre-emergence of the weeds.

Crops	Winter wheat, durum wheat, winter barley, winter rye and triticale		Spring barley
	MOST MICRO		MOST MICRO
Product	3.6 L/ha	2.7 L/ha	3.6 L/ha
Rate (Litres/ha)	3.6 L/ha	2.7 L/ha	3.6 L/ha
<b>Grass weed control</b>			
Annual meadow-grass	S	S	S
Awned canary-grass	-	-	-
Black-grass	-	-	-
Rough meadow-grass	MS	MS	MS
<b>Broad-leaved weeds</b>			
Black-bindweed	-	-	-
Black nightshade	-	-	-
Cleavers	-	-	-
Common chickweed	S	S	S
Common fumitory	MS	-	MS
Common orache	S	MS	S
Common poppy	S	MS	S
Corn buttercup	-	-	-
Corn marigold	S	S	S
Fat-hen	S	MS	S
Field forget-me-not	S	MS	S
Field pansy	S	MS	S
Hemp-nettle (Day nettle)	S	S	S
Henbit dead-nettle	S	S	S
Knotgrass	S	MS	S
Mayweeds	MS	-	-
Parsley piert	S	S	S
Red dead-nettle	S	S	S
Redshank (early germinating)	-	-	-
Scarlet pimpernel	S	S	S
Shepherd's purse	MS	-	MS
Small nettle	S	-	S
Smooth sowthistle	S	MS	S
Speedwells	S	S	S
Volunteer oilseed rape (1)	S	S	MS

S = Susceptible MS = Moderately susceptible (1) = Deep germinating volunteer oilseed rape may not be controlled

- = no data

## Other crops

Crops	Sunflowers	Potatoes (First early, second early and maincrop)	Forage maize and grain maize
Product	<b>MOST MICRO</b>	<b>MOST MICRO</b>	<b>MOST MICRO</b>
Rate (Litres/ha)	3.6 L/ha	3.6 L/ha	4.1 L/ha
Tank mix partner	-	Metribuzin	
Rate (g/ha)		350 g/ha	
Annual meadow-grass	S pre-em	S pre-em	S pre-em
Black-grass	-	-	-
Rough meadow-grass	MS pre-em	MS pre-em	MS pre-em
Black and white mustard	-	-	-
Black bindweed	-	MS pre-em	-
Black nightshade	-	-	S pre-em
Charlock	-	S pre-em	-
Cleavers (#)	-	MS pre-em	-
Common chickweed	S pre-em	S pre-em	S pre-em
Common fumitory (#)	MS pre-em	MS pre-em	MS pre-em
Common orache	S pre-em	S pre-em	S pre-em
Common poppy	S pre-em	S pre-em	S pre-em
Corn buttercup	-	-	-
Corn marigold	S pre-em	S pre-em	S pre-em
Fat-hen	S pre-em	S pre-em	S pre-em
Field forget-me-not	S pre-em	S pre-em	S pre-em
Field pansy	S pre-em	S pre-em	S pre-em
Groundsel	-	S pre-em	-
Hemp (day)-nettle	S pre-em	S pre-em	S pre-em
Henbit dead-nettle	S pre-em	S pre-em	S pre-em
Knotgrass	S pre-em	S pre-em	S pre-em
Mayweeds (#)	-	S pre-em	-
Parsley piert	S pre-em	S pre-em	S pre-em
Red dead nettle	S pre-em	S pre-em	S pre-em
Redshank (1)	-	S pre-em	-
Scarlet pimpernel	S pre-em	S pre-em	S pre-em
Shepherd's purse	MS pre-em	MS pre-em	MS pre-em
Small nettle	S pre-em	S pre-em	S pre-em
Smooth sowthistle	S pre-em	MS pre-em	S pre-em
Speedwells	S pre-em	S pre-em	S pre-em
Volunteer oilseed rape (2)	MS pre-em	S pre-em	MS pre-em

S = Susceptible MS = Moderately susceptible (1) = Early germinating (2) = Deep germinating volunteer oilseed rape may not be controlled # = If application is followed by a period of dry conditions, or in situations where very heavy populations occur, a sequence of **MOST MICRO** and a product applied post-emergence may be necessary - = no data

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## Resistance management

Strains of some annual grasses (eg Black-grass, wild-oats, and Italian ryegrass) have developed resistance to herbicides, which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. 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.

Populations of black-grass and Italian ryegrass with high levels of enhanced metabolism resistance will not be fully controlled.

Key elements of the resistance management strategy for **MOST MICRO**:

- Always follow WRAG guidelines for preventing and managing herbicide resistant weeds.
- Maximise the use of cultural control measures wherever possible (e.g. crop rotation, ploughing, stale seedbeds, delayed drilling, etc.).
- Use tank mixes or sequences of effective herbicides with different modes of action within individual crops, or successive crops.
- For the control of herbicide resistant grassweeds, always use **MOST MICRO** in tank mix or sequence with other effective graminicides with different modes of action.
- 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.

## CROP SPECIFIC INFORMATION

Winter wheat, durum wheat, winter barley

Winter rye, triticale

MOST MICRO applied alone	
Product	MOST MICRO
Rate (Litres/ha)	2.7 or 3.6 L/ha
Water volume	200 L/ha
Timing	Pre-emergence of the crop to before leaf sheath erect stage, (GS30). Do not apply pre-emergence to crops drilled after 30th November.
Seed depth	Seed must be covered with a MINIMUM of 3.2cm of settled soil. ONLY treat shallow drilled crops POST-EMERGENCE.

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## Spring barley

Product	<b>MOST MICRO</b>
Rate (Litres/ha)	3.6 L/ha
Water volume	200 L/ha
Timing	Pre-emergence of the crop. Apply <b>MOST MICRO</b> as soon as possible after drilling and before emergence. Due to risk of dry soils, do not apply <b>MOST MICRO</b> alone after the end of March unless rainfall is imminent.
Seed depth	Seed must be covered with a MINIMUM of 3.2cm of settled soil.

## Potatoes (First early, second early and maincrops)

<b>MOST MICRO applied in tank mix with Metribuzin</b>	
Product	<b>MOST MICRO + Metribuzin</b>
Rate (Litres/ha)	3.6 L/ha + 350g/ha In dry conditions apply a <b>MOST MICRO – Metribuzin</b> sequence.
Water volume	200 L/ha
Timing	Pre-emergence of the crop. Apply as soon as possible after planting and final ridging up. Loose structured ridges must be allowed time for settlement before application. Do not apply later than 7 days before emergence.
Soil types	Do not use on Sands (S), Gravelly or Stony soils.
Variety	Read the Metribuzin label carefully, particularly with regard to varietal restrictions.
Application	<b>MOST MICRO</b> should be applied in a minimum of 200 litres of water/ha.
Notes	Best weed control will be achieved with settled well-rounded ridges with few clods. If re-ridging is necessary, delay application until after the final ridging is completed. Slight distortion and discolouration of the initial shoots may occur if very heavy rain falls after application but before emergence, particularly to crops grown on very light soils. This is quickly outgrown and subsequent growth is unaffected. Read the Metribuzin label carefully, particularly with regard to following crop restrictions.

## Sunflowers

Product	<b>MOST MICRO</b>
Rate (Litres/ha)	3.6 L/ha
Water volume	200 L/ha
Timing	Apply as soon as possible after sowing and final seedbed cultivation, before crop and weed emergence.
Seedbed	Consolidate seedbeds after drilling to provide a firm level soil. Seed should be drilled so that after seedbed consolidation it is covered by a minimum of 2.5cm of settled soil.

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## Forage maize and grain maize (open crops and crops under plastic)

Product	MOST MICRO
Rate (Litres/ha)	4.1 L/ha
Water volume	200 L/ha
Timing	Pre-emergence to before 4th leaf of the crop.
Notes	Do not use on sweetcorn or maize grown for seed. Seed must be covered by a minimum of 5cm of settled soil. The use of <b>MOST MICRO</b> may affect the full development of crown roots which function only to anchor the plant. This has no effect on the yield of maize. If application is followed by a period of dry conditions or in situations where very heavy populations occur, a sequence of <b>MOST MICRO</b> and a product applied post-emergence may be necessary.

## FOLLOWING CROPS

### Following crops after normal harvest

Before ryegrass is drilled after a very dry season, plough or cultivate to at least 15cm.

If spring crops are to be followed by crops other than cereals plough or cultivate to at least 15cm.

### In the event of crop failure

In the event of crop failure the land must be ploughed or thoroughly cultivated to a minimum depth of 15cm to ensure any residues are evenly dispersed throughout the soil.

The minimum intervals (specified below) should elapse between application of **MOST MICRO** and the sowing of one of the following crops listed below.

Application timing	Minimum interval	In the event of crop failure, the following crops may be drilled:
Autumn	5 months	Spring wheat, spring barley, spring field beans, broad beans, dwarf beans, brussels sprouts, cabbage, calabrese, carrots, cauliflower, parsnips, parsley, peas, potato, linseed, maize, turnip
Spring and early summer	2 months	Spring field beans, broad beans, dwarf beans, brussels sprouts, cabbage, calabrese, carrots, cauliflower, parsnips, parsley, peas, linseed, turnip
	5 months	Any crop may be planted or sown <b>(with the exception of red beet, sugar beet and spinach)</b>
	12 months	Red beet, sugar beet and spinach

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## MIXING AND APPLICATION

### Following crops after normal harvest

Never prepare more spray solution than is required.

Half fill the tank with clean water and start the agitation. To ensure thorough mixing of the product, invert the container several times before opening. Add the required quantity of **MOST MICRO** to the spray tank while re-circulating. Fill up the tank with water and continue agitation until spraying is completed.

When tank mixes are to be used, take due note of any instructions given as to the order of mixing. Each product should be added separately to the spray tank and fully dispersed before the addition of any further product(s).

On emptying the container, rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of container safely.

### Application

**MOST MICRO** can be used in tractor mounted/trailed sprayer and knapsacks. Ensure good, even spray cover of the target using a FINE or MEDIUM quality spray, as defined by BCPC.

### Boom sprayers

Apply **MOST MICRO** in 100-200 L/ha.

When tank mixing with other products use a minimum water volume of 200 L/ha depending on the tank mix partner.

For potatoes apply **MOST MICRO** in minimum 200 L/ha.

### Knapsack sprayers

Use a maximum of 16 mls of **MOST MICRO** per litre of water and ensure a good, fine coverage of the target.

### Sprayer cleaning

After spraying, thoroughly clean and flush out application machinery with a minimum of three rinses, to ensure that all traces of product are removed to avoid sticking of dried material to spray tank walls or spray lines, etc.

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## TANK MIXTURES

When tank-mixing **ONLY APPLY** within label conditions for each product.

For up-to-date details of compatible tank-mixes, contact your supplier or local Sipcam representative.

### Sequential treatments

**MOST MICRO** may be used in sequence with any other approved product. Leave a minimum interval of 24 hours unless longer is specified on the label. **MOST MICRO** may be applied in sequence with Avadex provided only one product is applied pre-emergence of the crop.

## SAFETY PRECAUTIONS

### Operator protection

Avoid all contact with skin and eyes.

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.

Wash all protective clothing thoroughly after use, especially the insides of gloves.

### 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.

Empty container completely and dispose safely.

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## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF SUBSTANCE, PREPARATION AND COMPANY

Product name – MOST MICRO.

MAPP – 16063.

Use – Agricultural Herbicide.


Formulation Type – Microencapsulate (CS).

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

Emergency phone no – 01763 212100.

### 2. HAZARDS IDENTIFICATION

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

WARNING	
	MAY CAUSE AN ALLERGIC SKIN REACTION HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS
Additional information For the wording of risk and safety phrases refer to section 15.	

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

	CAS/ ENICS	R PHRASES	%
Pendamethalin	40487-42-1 / 254-938-2	⚠ Skin sens. 1,H317; ⚠ Aquatic 1, H410	31.7%
Solvent naphtha	64742-94-5 / 265-198-5	⚠ Asp Tox 1, H304	5.0%

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

### 4. FIRST AID MEASURES

**General information** – Show this safety data sheet to the doctor. Immediately remove soiled clothing. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**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** – Immediately wash with water and soap and rinse thoroughly.

**After eye contact** – Rinse opened eye for several minutes under running water. Then consult doctor.

**After swallowing** – In case of persistent symptoms consult doctor.

**Information for doctor** – Active ingredient group: Pendimethalin: dinitroaniline. Symptoms of accidental overexposure: fatigue, excessive & unusual sweating; thirst; insomnia & weight loss.

**Indication of any immediate medical attention and special treatment needed** – Treat symptomatically. 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** – Carbon monoxide, nitrogen oxides, can be released. Avoid breathing smoke

& fumes.

**Protective equipment** – Do not inhale explosion or combustion gases. Put on breathing apparatus & protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** – See section 8.

**Environmental precautions** – Do not allow to enter drainage system, surface or ground water. Keep dirty washing water for appropriate disposal.

**Methods and material for containment and cleaning up** – Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13. Collect mechanically.

### 7. HANDLING AND STORAGE

**Precautions for safe handling** – Keep away from heat and direct sunlight. Prevent formation of aerosols.

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care.

**Information about protection against explosions and fires** – Keep ignition sources away. Do not smoke. Flammable mixtures may be formed in empty containers.

**Storage requirements to be met by storerooms and containers** – Store in a cool location. Store only in original container.

**Information about storage in one common storage facility** – Not required.

**Further information about storage conditions** – Keep container tightly sealed. Protect from frost.

### 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**Components with limit values that require monitoring at the workplace** – Solvent naphtha (5%) OEL Short term value: 100 mg/m<sup>3</sup>.

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

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Do not eat or drink while working.

Avoid contact with eyes and skin.

**Breathing equipment** – In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air. Recommended filter device: Filter AX.

**Protection of hands** – Protective gloves.

**Eye protection** – Tightly sealed safety glasses.

**Body protection** – Protective work clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** –

**Form** – Liquid suspension.

**Colour** – Yellow.

**Odour** – Characteristic.

pH value at 20°C – 7.4.

Melting point or range – Not determined.

Boiling point/range – Not determined.

Flash point – Not applicable.

Self-inflammability – Product is not self-igniting.

Danger of explosion – Product is not explosive.

Segregation coefficient – Not applicable.

Surface tension – 45.6mN/m @25°C.

Solubility / Miscibility (water) – Dispersible.

Density – 1.127 g/cm<sup>3</sup> @ 20°C.

Viscosity – 1043 cps.

#### 10. REACTIVITY AND STABILITY

Thermal decomposition / conditions to be avoided – No decomposition if used according to specifications.

Possibility of hazardous reactions – No dangerous reactions known.

Conditions to avoid – No further relevant information available.

Incompatible materials – No further relevant information available.

Hazardous decomposition products – Thermal decomposition products may include toxic and corrosive fumes of chlorides and toxic oxides of nitrogen.

#### 11. TOXICOLOGICAL INFORMATION

LD/LC50 values that are relevant for classification –

Oral LD50 >2000 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rat)

Skin Irritation – No irritant effect.

Eye Irritation – No irritant effect.

Sensitisation – Sensitizing.

#### 12. ECOLOGICAL INFORMATION

Aquatic toxicity (active ingredient) –

EC 50 – 27.5 (0-72h) mg/l (algae).

LC 50 – 100 (48h) mg/l (*daphnia magna*).

LC 50 – 141 (96h) mg/l (rainbow trout).

Persistence and degradability – No further relevant information available.

Assessment biodegradation & elimination (H2O) – Not readily biodegradable (by OECD criteria).

PBT – Not applicable.

vPvB – Not applicable.

#### 13. DISPOSAL

Waste or used preparation – Use specialist waste contractor in accordance with local regulations.

Disposal of packaging – Use specialist waste contractor in accordance with local regulations.

#### 14. TRANSPORT

UN-Number (ADR, IMDG, IATA) – not regulated

Proper shipping name (ADR/RID, IMDG, ICAO/IATA) – not applicable

Hazard class (ADR, IMDG, IATA) – none

Packing group (ADR, IMDG, IATA) – none

Marine pollutant – No

Hazard label – none

#### 15. REGULATORY INFORMATION

Hazard-determining components of labelling – PENDAMETHALIN, SOLVENT NAPHTHA.

Precautionary (P) statements:

P280	Wear gloves, protective clothing and eye/face protection
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P333+P313	If skin irritation or rash occurs: Get medical advice/attention
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
SP1	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)

#### 16 OTHER INFORMATION

R Phrases referenced in section 3

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 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. June 2015.*