

# TITHE<sup>®</sup>

GROUP 1 HERBICIDE

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MAPP 19515

A systemic foliar applied herbicide for the post-emergence control of annual and perennial grass weeds in oilseed rape, swedes, turnips, linseed, combining peas, field beans, French dwarf beans, Navy beans, broad beans, potatoes, sugar beet, fodder beet, carrots and bulb onions.

An emulsifiable concentrate containing 100 g/l (9.7% w/w) propaquizafop. Also contains propylene carbonate and hydrocarbons, C10-C13, aromatics, <1% naphthalene.



ADAMA



Scan for Safety Data Sheet or use weblink:  
<https://bit.ly/2CTqKQ9>

FR R3.0.1 MAY21



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## Danger

**May be fatal if swallowed and enters airways.**

**Causes serious eye irritation. Toxic to aquatic life with long lasting effects.**

**Repeated exposure may cause skin dryness or cracking. Contains propaquizafop. May produce an allergic reaction.**

Keep out of reach of children. Avoid breathing vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: immediately call a poison centre or doctor/physician. IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting. 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.

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

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# TITHE<sup>®</sup>

## MAPP 19515

**SHAKE WELL BEFORE USE  
PROTECT FROM FROST**

**DIRECTIONS FOR USE:**

full instructions in this leaflet.

Batch No.: see packaging

**Adama Agricultural Solutions UK Ltd**

Third Floor East, 1410 Arlington Business Park, Theale, Reading RG7 4SA

**Telephone:** 01635 860555 | **Technical Helpline:** 01635 876622

**www.adama.com | ukenquiries@adama.com**

**For advice on medical emergencies, fires or major spills telephone  
the National Chemical Emergency Centre on 01865 407333**

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

OPEN HERE ►

## SAFETY PRECAUTIONS

### Operator Protection

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, RUBBER BOOTS AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.  
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when applying by hand-held equipment.

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

TAKE OFF IMMEDIATELY all contaminated clothing.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

WHEN USING, DO NOT EAT, DRINK OR SMOKE.

### 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.

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

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

DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 m of the top of the bank of a static or flowing waterbody. Aim spray away from water.

This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with HSE's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

### Storage and Disposal

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

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.  
DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

## IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL HERBICIDE

**Crops/situations:** Oilseed rape (winter & spring), field bean, broad bean, French dwarf bean, Navy bean, linseed, sugar beet, fodder beet, swede, turnip, potato (maincrop & early), carrot, bulb onion and combining pea.

**Maximum individual dose (litres product/ha)**

**Maximum number of applications**

**Latest time of application**

**Aquatic buffer zone distance (metres)**

**Other specific restrictions**

Full details are given in the information box within this leaflet.

**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.**

BK R3.0.1 MAY21

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## This leaflet is part of the approved label.

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comply with the instructions for use.**

## IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL HERBICIDE

Crops/situations	Maximum individual dose (litres product/ha)	Maximum number of applications	Latest time of application	Aquatic buffer zone distance (metres)
Oilseed rape (winter)	1.5	One per crop	Before flower buds visible stage and 90 days before harvest	5
Oilseed rape (spring)	1.5	One per crop	Before eight fully expanded leaves stage and 90 days before harvest	5
Field bean	1.5	One per crop	Before flower buds visible stage and 7 weeks before harvest	5
Broad bean, French dwarf bean, Navy bean	1.5	One per crop	Before flower buds visible stage and 7 weeks before harvest	5
Linseed	1.5	One per crop	Before flower buds visible stage and 16 weeks before harvest	5
Sugar beet, fodder beet	1.5	One per crop	60 days before harvest	5
Swede, turnip	1.5	One per crop	30 days before harvest	5
Potato (maincrop), potato (early)	1.5	One per crop	30 days before harvest	5
Carrot	1.5	One per crop	30 days before harvest	5
Bulb onion	1.5	One per crop	30 days before harvest	5
Combining pea	1.5	One per crop	7 weeks before harvest	5

### Other specific restrictions:

To avoid the build up of resistance do not apply products containing an ACCase inhibitor herbicide more than twice to any crop. In addition, do not use this product in mixture or sequence with any other product containing propaquizafop.

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# SAFETY PRECAUTIONS

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## Environmental Protection

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## 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.

TITHE® is a systemic foliar applied herbicide for the post-emergence control of annual and perennial grass weeds in oilseed rape, swedes, turnips, linseed, combining peas, field beans, dwarf French bean and Navy beans, broad beans, potatoes, sugar beet, fodder beet, carrots and bulb onions.

Weeds must be emerged at the time of application.

## RESTRICTIONS OR WARNINGS

TITHE is foliar acting and the dose is therefore independent of soil type.

Avoid overlaps.

Avoid spray drift onto neighbouring crops, especially cereal crops.

### Peas and beans

If TITHE is applied during periods of high temperatures and/or low soil moisture content chlorotic spotting of the crop may result, particularly on combining peas and field beans, but there is no adverse effect on subsequent growth or yield of combining peas.

### Carrots and onions

Crop effects can occur when the couch dose is applied at early growth stages in carrots and onions.

### Potatoes

TITHE must not be applied to seed crops.

Crops suffering from frost damage should not be treated.

### Qualified minor use recommendation

TITHE can also be used on dwarf French beans, broad beans and Navy beans as a qualified minor use recommendation as crop safety on these crops is based on limited evidence.

### Resistance warning

This product contains propaquizafop which is an ACCase inhibitor, also classified by the Herbicide Resistance Action Committee as 'Group 1'. Use only as part of a resistance management strategy that includes cultural methods of control and does not use ACCase inhibitors as the sole chemical method of grass weed control. Applying a second product containing an ACCase inhibitor to a crop will increase the risk of resistance development, only use a second ACCase inhibitor to control different weeds at a different timing.

Strains of some annual grasses (e.g. 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 advisor or product manufacturer.

Specifically:

- To reduce the risk of developing resistance applications should be made to young, actively growing weeds.
- Use crop rotation and other cultural control measures to prevent and manage herbicide resistant grass weeds.
- Always follow WRAG guidelines for preventing and managing herbicide resistant grass weeds.
- Do not use TITHE or any other ACCase inhibitor as the sole means of grass weed control in successive crops.
- Use grass weed herbicides with different modes of action throughout the cropping rotation.
- Use tank/product mixes or sequences of herbicides with different modes of action within individual crops, or successive crops.
- Monitor weed control effectiveness and investigate any odd patches of poor grass weed control. If unexplained, contact your agronomist who may consider a resistance test appropriate.

## WEED CONTROL

Speed of kill will be more rapid when weeds are growing actively under warm conditions with adequate moisture. Treatment under cool conditions will give slower activity. In poor conditions use the higher dose.

Weeds germinating after application will NOT be controlled.

Broad-leaved weeds will NOT be controlled.

The following weeds are controlled up to growth stages indicated at the dose indicated.

Weed	Weed growth stage	Dose <sup>(1)</sup> litre product/ha
Volunteer barley	Optimum: 2 leaves unfolded to end of tillering. Latest: Stem erect	0.5–1.0
Volunteer wheat and rye	Optimum: 2 leaves unfolded to end of tillering. Latest: Stem erect	0.7–1.0
Wild oats	Optimum: 2 leaves unfolded to early tillering. Latest: Stem erect	0.7–1.0
Barley cover crops <sup>(2)</sup>	Optimum: 2 leaves unfolded to stem erect. Latest: 2nd node detectable	1.0–1.2
Ryegrass (from seed)	Optimum: 2 leaves unfolded to early tillering. Latest: Before stem erect	1.2–1.5
Common couch	3 leaves unfolded (when majority of shoots have emerged and are approximately 15 cm tall)	1.5
Sterile brome ( <i>Bromus sterilis</i> )	Optimum: 2 expanded leaves to fully tillered.	0.7–1.0

### Notes:

- Use highest dose specified if weeds are beyond optimum growth stage or under the following conditions:
  - Poor growing conditions, e.g. cool temperatures, dry soil
  - Overwintered weeds
  - Severe weed infestations especially in non-competitive crops e.g. sugar beet, bulb onions and thin crops of oilseed rape
- Barley cover crops: spray when risk of wind blow has passed and before there is serious competition with the crop. Use the higher dose of 1.2 L/ha if spraying is late.

### Annual Meadowgrass

Growth will be checked at doses of 0.7–1.0 L/ha and severely checked at 1.5 L/ha. These effects will be reduced if annual meadowgrass is beyond 3 leaves unfolded stage at spraying.

### Blackgrass

TITHE can contribute to the control of blackgrass as part of a herbicide resistance management strategy, involving mixtures and sequences with herbicides of alternative modes of action. Where resistant biotypes are present control from TITHE will be unacceptable.

## CROP SPECIFIC INFORMATION

TITHE may be applied to the following crops as indicated:

Crop	Optimum time to commence spraying when crop is at the following GS	Latest application timing (PHI – Pre-Harvest Interval)
Oilseed rape, winter	Expanded cotyledons*	Before flower buds visible stage (PHI = 90 days)
Oilseed rape, spring	Expanded cotyledons*	Before 8 fully expanded leaves stage (PHI = 90 days)
Swedes, turnips	2 pairs of leaves	Before weeds are covered by the crop (PHI = 30 days)
Linseed	3 leaves	Before flower buds visible stage (PHI = 16 weeks)
Peas, combining	2 pairs of leaves (3rd node)	At flower buds visible stage (PHI = 7 weeks)
Field beans, winter and spring	2 pairs of leaves	Before flower bud visible stage (PHI = 7 weeks)
Broad bean, French dwarf bean and Navy bean	2 pairs of leaves	Before flower bud visible stage (PHI = 7 weeks)
Potatoes (Do not treat seed crops)	15-20 cm high	Before weeds are covered by the crop (PHI = 30 days)
Sugar beet, fodder beet	2 true leaves	Before weeds are covered by the crop (PHI = 60 days)
Carrots	1 true leaf	PHI = 30 days
Onions, bulb	Immediately post crook	PHI = 30 days

\* 1.5 L/ha (the common couch dose) must not be applied to crops of winter and spring oilseed rape before the 5 leaf stage of the crop.

## FOLLOWING CROPS

If a crop treated with TITHE should fail for any reason, or after normal harvest, the minimum intervals listed must be observed before replanting any of the following crops:

Winter wheat, winter barley  
2 weeks

Peas, field beans, maize and winter oilseed rape  
4 weeks

Winter oats  
16 weeks

Ryegrass  
8 weeks

## MIXING AND SPRAYING

TITHE should be applied as a FINE or MEDIUM spray (as defined by BCPC) in 100-200 litres water per hectare.

Good spray cover is essential for good results. Use the higher spray volume in dense crop or weed situations.

Half-fill the spray tank with clean water and begin agitation. Add required quantity of TITHE to the tank and complete the filling. Continue agitation until spraying is completed. Spray immediately after mixing.



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.

Sprayers should be thoroughly cleaned before use and filters and nozzles checked for damage and blockage.

TITHE may be applied by tractor mounted/drawn sprayer. The sprayer should be calibrated to apply 200–250 L/ha as a FINE or MEDIUM spray (as defined by BCPC).

Crops should not be re-entered until spray residues are dry.

### For knapsack sprayers

Half-fill the sprayer tank with clean water. Add the measured amount of product, with rinsings, to the sprayer tank and fit the tank lid. Gently shake the sprayer, by rocking, to ensure thorough mixing. Top up the tank with water to the correct level. Refit the tank lid and again gently shake the sprayer, by rocking, to ensure thorough mixing.

When used at a walking speed of 1 m/sec to apply a swath of 1 m width, most knapsack sprayers fitted with a Lurmark AN 2.0 or similar nozzle deliver approximately 200 L/ha spray volume (or 10 L per 500 m<sup>2</sup>).

Table for product amounts applied through a knapsack sprayer

Rate of product L/ha	Amount product (ml) per L water applied at 200 L/ha water volume
0.5	2.5
0.7	3.5
1.0	5.0
1.2	6.0
1.5	7.5

## COMPATIBILITY

TITHE is compatible with the following products:

Cohort® or Crawler®

Always read the label of the partner product carefully before use.

## DISCLAIMER/CONDITIONS OF SUPPLY

The specified properties of our products and the mode of application stated on this label have been established on the basis of research and experience. Products conform to specification at the time of delivery but, as we exercise no control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application, all of which may affect the performance of the products, no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in or make recommendations concerning the use of such products. We recommend you contact your dealer to request advice on the suitability of this product for any new and/or unusual growing methods or for new varieties not listed on this label.

### Authorised and marketed by:

Adama Agricultural Solutions UK Ltd  
Third Floor East, 1410 Arlington Business Park  
Theale, Reading RG7 4SA  
Telephone: 01635 860555  
Technical Helpline: 01635 876622  
www.adama.com  
Email: ukenquiries@adama.com

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