



FLiPPER[®]

10L e



Insecticide

FLiPPER[®] is a contact insecticide for the useful control of whitefly, aphids and two-spotted mite on a range of protected crops.

An emulsion in water (EW) insecticide containing 479.8 g/litre (47.8% w/w) fatty Acids C7-C20.

MAPP 19154

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

Authorisation Holder:

Alpha BioPesticides Limited,
St John's Innovation Centre, Cowley Road,
Cambridge, CB4 0WS, United Kingdom.

Marketing Company:

Bayer CropScience Limited
230 Cambridge Science Park
Milton Road, Cambridge, CB4 0WB

Telephone: 01223 226500

**For 24 hour emergency information
contact Bayer CropScience Ltd.**

Telephone: 00800 1020 3333



Safety information

FLiPPER

Contains 479.8 g/litre (47.8% w/w)
fatty Acids C7-C20.



WARNING.

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

Avoid breathing vapours or spray.
Wash hands thoroughly after handling.
Use only in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do—continue rinsing.
If eye irritation persists: Get immediate medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Get medical advice/attention.
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 risk to human health and the environment, comply with the instructions for use.

IMPORTANT INFORMATION FOR USE ONLY AS A PROFESSIONAL INSECTICIDE

FLiPPER may only be used in a permanent glasshouse.

Crops:	Tomato (Permanent protection with full enclosure) Cucumber (Permanent protection with full enclosure) Strawberry (Permanent protection with full enclosure)
Maximum individual dose:	16 L product per hectare with a maximum concentration of 1.6 L per 100 L water.
Maximum number of treatments:	5 per crop.
Frequency of applications:	Apply every 7 days as required by pest pressure but do not apply more than three weekly applications consecutively.
Application timing:	Any time – No restriction.
Latest time of application:	No restriction.

Other specific restrictions:

1. Treatment must only be made under 'permanent protection' situations which provide full enclosure (including continuous top and side barriers down to below ground level) and which are present and maintained over a number of years.
2. Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops.
3. To minimise airborne environmental exposure, vents, doors and other openings must be closed during and after application until the applied product has fully settled.

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.



To access the **Safety Data Sheet** for this product scan the code or use the link below:

www.croppscience.bayer.co.uk/flippersds
or alternatively contact your supplier

GB86712016a rA1

Bayer

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 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.

FLiPPER® has a reduced re-entry period, following application. Re-entry may occur as soon as the crop has dried.

WHEN USING DO NOT EAT, DRINK OR SMOKE. AVOID ALL CONTACT WITH SKIN.

WASH CONCENTRATE from skin or eyes immediately.

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

DO NOT BREATHE SPRAY.

IF YOU FEEL UNWELL, seek medical advice (show label where possible).

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 AWAY FROM FOOD, DRINK & ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. Store in a well-ventilated place.

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

DO NOT RE-USE CONTAINER for any purpose.

DIRECTIONS FOR USE

Important: This information is authorised 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.

Important: FLiPPER® is a contact insecticide.

Ensure good coverage of the pest and placement of the spray, paying particular attention to the underside of leaves and to growing points.

FLiPPER® has a zero day harvest interval for the crops on which its use is recommended.

Restrictions or warnings

Due to the large number of species and cultivars grown, crop safety should first be determined by treating a small number of plants. Crop damage may occur when FLiPPER® is applied under very high temperatures.

Pests Controlled

FLiPPER® will provide useful control of whitefly (*Trialeurodes vaporariorum*, *Bemisia tabaci*, *Aleurothrix floccosus*), aphid (*Myzus persicae*, *Macrosiphum euphorbiae*, *Aphis gossypii*) and two-spotted mite (*Tetranychus urticae*) populations.

FLiPPER will control insects resistant to other insecticides. The impact in IPM/ICM programmes has not been established.

Crop Specific Information

Application rate: 1–1.6 litres per 100 litres water. For optimal effectiveness, such as high pest pressures, a dose rate of 1.6 L/100 litres may provide enhanced levels of control.

Water Volume: Apply in a volume of water sufficient to achieve total coverage of the target foliage. Normally 400–1000 litres per hectare for smaller plants and 1000–1600 litres per hectare for larger plants with dense foliage.

Timing: For optimum control, apply at the very first signs of pest emergence so that population build up is prevented through targeting the eggs and the very young larval stages. Highest levels of control will be achieved when applied during warmer, faster drying conditions.

Frequency of applications: Apply every 7 days as required by pest pressure.

Mode of action

FLIPPER® is active on eggs, larvae and adult insects. Levels of control achieved will depend on the pest stage and weather conditions at the time of application.

FLIPPER® has no residual insecticidal activity therefore repeat applications may be required according to pest pressure with a minimum of 7 days between applications.

Resistance

There are no reports of resistance to FLiPPER® however it is good practice to use such products as components of Integrated Pest Management systems, alternating with other control measures. This is particularly important for sequential crops.

MIXING & SPRAYING

Mixing

Thoroughly wash and clean the spray tank before adding FLiPPER®. Half fill the spray tank with water. Add the required quantity of FLiPPER® rinsing the container twice with fresh water and pouring the residue into the spray tank. Top up the spray tank with water. The product mixes readily with water and does not require vigorous agitation. Use of an agitator may cause the formation of foam.

Important: Use the freshly mixed spray straight away. Ideally apply using soft water or collected rainwater.

Hard Water: Do not use hard water containing metallic ions (calcium, magnesium, iron etc.) with concentrations greater than 300 ppm. If required, a buffering agent may be added to the water prior to mixing in order to prevent precipitation.

When using a buffering agent do not lower the pH of the final spray mixture below 8.0.

Where foaming occurs an anti-foam agent may be used in conjunction with FLiPPER®

Compatibility

FLIPPER® is physically compatible with a wide range of formulated products. For a full list of compatibilities consult the manufacturer or local distributors.

Do not tank mix pesticides or foliar feeds containing sulfur or metallic ions (such as zinc, copper or iron). These may be physically incompatible and may cause phytotoxicity.

Do not mix with acidic pesticides, fertilisers or with products containing fosetyl-aluminium, mycobutanil, cypermethrin, *Bacillus thuringiensis* or chelating agents.

Storage

Do not store diluted product.

Store concentrate in original container at ambient temperature in a dry place.

Protect concentrate from frost. Storage below 10°C may cause crystallization to occur. This is completely reversible and will not affect the effectiveness of the product.

EXTENSION OF USE:

Before use of FLIPPER under an Extension of Use Authorisation (EAMU) specified below, users must have a copy of the EAMU authorisation which can be downloaded from CRDs website, searching for 'MAPP 19154':

<https://secure.pesticides.gov.uk/offlabels/search.asp>

These extensions of the authorised use provide for the use of FLIPPER in respect of crops and situations other than those included on the product label (above). Neither the efficacy or the phytotoxicity of the product for which an Extension of authorisation has been granted have been assessed and, as such, the user bears the risk in respect of failures concerning its efficacy and phytotoxicity.

This product must only be applied in accordance with the terms of these extensions of authorisation, the product label and/or leaflet and any additional guidance on extensions of authorisation.

Extension of use – Outdoor and protected field vegetables:

This Extension of Authorisation relates to the use of 'FLIPPER' (M19154) for use on the field grown vegetables listed below for the control of thrips (*Thrips tabaci*), Aphids (*Aphididae*) and cabbage aphid.

Application is to be made using high-volume broadcast spray equipment, conventional hydraulic boom applicators or hand-held sprayers to outdoor crops in 300–500 litres water per hectare and to protected crops in 400–1000 litres water per hectare.

All protected uses include temporary protection and permanent protection with full enclosure.

Crops:	<p>Outdoor crops of carrot, celeriac, horseradish, Jerusalem artichoke, parsley root, parsnip, radish, red beet, salsify, swede, turnip.</p> <p>Outdoor crops of bulb onion, garlic, salad onion, shallot.</p> <p>Outdoor crops of asparagus, celery, Florence fennel, Globe artichoke, leek, rhubarb.</p> <p>Outdoor crops of courgette and summer squash, sweetcorn, winter squash and pumpkin.</p> <p>Outdoor crops of broccoli / calabrese, Brussels sprout, cabbage, cauliflower, choy sum, collard kale, kohlrabi, oriental cabbage.</p> <p>Outdoor crops of beans without pods—fresh, broad bean (fresh), dwarf French bean, edible podded pea, lentil (fresh), runner bean, vining pea.</p>
Maximum individual dose:	5 L product per hectare.

Maximum number of treatments:	9 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications and a minimum interval of 28 days must be observed between each block of 3 applications.
Application timing:	Application must only be made between 1 March and 30 September when applying to crops grown outdoors and under temporary protection.
Latest time of application:	No restrictions.

Crops:	Protected crops of asparagus, celery, Florence fennel, Globe artichoke, leek, rhubarb. Protected crops of courgette and summer squash, sweetcorn, winter squash and pumpkin. Protected crops of broccoli / calabrese, Brussels sprout, cabbage, cauliflower, choi sum, collard kale, kohlrabi, oriental cabbage Protected crops of beans without pods—fresh, broad bean (fresh), dwarf French bean, edible podded pea, lentil (fresh), runner bean, vining pea.
Maximum individual dose:	10 L product per hectare.
Maximum number of treatments:	8 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications and a minimum interval of 28 days must be observed between each block of 3 applications.
Application timing:	Application must only be made between 1 March and 30 September when applying to crops grown outdoors and under temporary protection.
Latest time of application:	No restrictions.

Restrictions related to these FAMUs:

The use of this product in recirculating water systems in a glasshouse may result in dilute pesticide waste that requires disposal. All dilute pesticide waste must be disposed of safely and legally to protect humans, wildlife and the environment, especially groundwater and surface water. Pesticide disposal advice is detailed in the 'Code of Practice for Using Plant Protection Products (Section 5: Disposing of Pesticide Waste)'.

Extension of use – Outdoor and protected leafy vegetables and fresh herbs:

This Extension of Authorisation relates to the use of 'FLIPPER' (M19154) on the leafy vegetables and fresh herbs listed below for the control of Aphids (*Aphididae*), Western Flower Thrip (*Frankliniella occidentalis*), thrips (*Thrips tabaci*) and spider mite (*Tetranychus urticae*).

Application is to be made using high-volume broadcast spray equipment, conventional hydraulic boom applicators or hand-held sprayers to outdoor crops in 300–500 litres water per hectare and to protected crops in 400–1000 litres water per hectare.

All protected uses include temporary protection and permanent protection with full enclosure.

Crops:	<p>Outdoor crops of angelica, baby leaf crops, balm, basil, bay, caraway leaves, celery leaves, chervil, chives, coriander leaves, cress, dill leaves, edible flowers, endive, fennel leaves, herb - other, hyssop, lamb's lettuce, land cress, lettuce, lovage leaves, marjoram, mint, oregano, parsley, purslane, red mustard, rocket, rosemary, sage, salad burnet, savory, spinach, spinach beet, sweet cicely, tarragon, thyme, watercress in propagation.</p> <p>Outdoor crops of chamomile, ginkgo, ginseng, hibiscus flowers, jasmine flowers, lime flowers, mallow, rose petals, strawberry leaves, valerian.</p>
Maximum individual dose:	5 L product per hectare.
Maximum number of treatments:	9 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications and a minimum interval of 28 days must be observed between each block of 3 applications.
Application timing:	Application must only be made between 1 March and 30 August when applying to crops grown outdoors and under temporary protection.
Latest time of application:	No restrictions.

Crops:	<p>Protected crops of angelica, baby leaf crops, balm, basil, bay, caraway leaves, celery leaves, chervil, chicory (witloof), chives, coriander leaves, cress, dill leaves, edible flowers, endive, fennel leaves, herb—other, hyssop, lamb's lettuce, lettuce, lovage leaves, marjoram, mint, oregano, parsley, purslane, red mustard, rocket, rosemary, sage, salad burnet, savory, spinach, spinach beet, sweet cicely, tarragon, thyme, watercress in propagation.</p> <p>Protected crops of chamomile, ginkgo, ginseng, hibiscus flowers, jasmine flowers, lime flowers, mallow, rose petals, strawberry leaves, valerian.</p>
Maximum individual dose:	10 L product per hectare.
Maximum number of treatments:	8 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications and a minimum interval of 28 days must be observed between each block of 3 applications.
Application timing:	Application must only be made between 1 March and 30 August when applying to crops grown outdoors and under temporary protection.
Latest time of application:	No restrictions.

Restrictions related to these FAMUs:

The use of this product in recirculating water systems in a glasshouse may result in dilute pesticide waste that requires disposal. All dilute pesticide waste must be disposed of safely and legally to protect humans, wildlife and the environment, especially groundwater and surface water. Pesticide disposal advice is detailed in the 'Code of Practice for Using Plant Protection Products (Section 5: Disposing of Pesticide Waste)'.

Extension of use – Outdoor and protected soft fruit

This Extension of Authorisation relates to the use of 'FLIPPER' (M19154) for use on the soft fruit listed below for the control of Aphids (*Aphididae*), two spotted spider mite (*Tetranychus urticae*), Western Flower Thrip (*Frankliniella occidentalis*), leaf hoppers, Strawberry blossom weevil (*Anthonomus rubi*), Thrips (*Thrips fuscipennis*) and white fly.

Application is to be made using high-volume broadcast spray equipment, conventional hydraulic boom applicators or hand-held sprayers to outdoor crops in 400–1000 litres water per hectare and to protected crops in 400–1000 litres water per hectare.

All protected uses include temporary protection and permanent protection with full enclosure.

Crops:	Protected and outdoor crops of bilberry, blackberry, blackcurrant and redcurrant, blueberry, cranberry, elderberry, gooseberry, loganberry and rubus hybrid, mulberry, raspberry, rose hips, strawberries.
Maximum individual dose:	10 L product per hectare.
Maximum number of treatments:	8 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications and a minimum interval of 28 days must be observed between each block of 3 applications.
Application timing:	Application must only be made between 1 March and 30 August when applying to crops grown outdoors and under temporary protection.
Latest time of application:	No restrictions.

Restrictions related to these FAMUs:

The following Aquatic Buffer Zones must be observed:

Crops/situations:	Aquatic buffer zone distance (metres):	Comment:
Bilberry, blackberry, blackcurrant and redcurrant, blueberry, cranberry, elderberry, gooseberry, loganberry and rubus hybrid, mulberry, raspberry, rose hips, strawberries.	10	DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within the distance specified for the crop to the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water. ALL CROPS WITH A BUFFER ZONE GREATER THAN 5M ARE NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME.

This product qualifies for inclusion within the Local Environment 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 CRD's published guidance or the statutory buffer zone as appropriate to the crop must be maintained. **NOTE ALL BUFFER ZONES OF MORE THAN 5 M VIA HORIZONTAL BOOM SPRAYER ARE NOT REDUCIBLE.** The results of the LERAP must be recorded and kept available for three years.

The use of this product in recirculating water systems in a glasshouse may result in dilute pesticide waste that requires disposal. All dilute pesticide waste must be disposed of safely and legally to protect humans, wildlife and the environment, especially groundwater and surface water. Pesticide disposal advice is detailed in the 'Code of Practice for Using Plant Protection Products (Section 5: Disposing of Pesticide Waste)'.

Extension of use – Tree fruit grown outdoor and under temporary protection

This Extension of Authorisation relates to the use of 'FLIPPER' (M19154) for use on Tree nuts, Pome fruit, Stone fruit and Wine grapes grown outdoors and under temporary protection as listed below. This Extension of Authorisation is for the control of Aphids (*Aphididae*), two spotted spider mite (*Tetranychus urticae*) and blossom weevil.

Application is to be made using broadcast air assisted fruit tree sprayers in 400–1000 litres water per hectare.

Crops:	Protected and outdoor crops of almond, apple, apricot, cherry, chestnut, hazelnut, peach and nectarine, pear, plum, quince, walnut, wine grapes.
Maximum individual dose:	10 L product per hectare.
Maximum number of treatments:	8 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications and a minimum interval of 28 days must be observed between each block of 3 applications.
Application timing:	Application must only be made between 1 March and 30 August when applying to crops grown outdoors and under temporary protection.
Latest time of application:	No restrictions.

Restrictions related to these EAMUs

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

DO NOT ALLOW DIRECT SPRAY from broadcast air-assisted sprayers to fall within 20 m of the top of the bank of a static or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 5 m of the top of a ditch which is dry at the time of application. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a broadcast air-assisted sprayer, either a LERAP must be carried out in accordance with CRD'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.

Extension of use – ornamentals (grown under permanent protection with full enclosure)

This Extension of Authorisation relates to the use of 'FLIPPER' (M19154) on ornamentals (grown under permanent protection with full enclosure) for the control of aphids, whitefly and spider mite.

To be applied using hand held sprayers and indoor gantry sprayer at a rate of 16 Litres product / ha, water volume 400–1600 L/ha.

Crops:	Permanent protection with full enclosure ornamentals.
Maximum individual dose:	16 L product per hectare.
Maximum number of treatments:	5 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications.
Application timing:	No restrictions.
Latest time of application:	No restrictions.

Restrictions related to these FAMUs

Treatment must only be made under 'permanent protection' situations which provide full enclosure (including continuous top and side barriers down to below ground level) and which are present and maintained over a number of years.

Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops.

To minimise airborne environmental exposure, vents, doors and other openings must be closed during and after application until the applied product has fully settled.

Extension of use – chillies, peppers and aubergine in permanent glasshouses with full enclosure

This Extension of Authorisation relates to the use of 'FLIPPER' (M19154) to control aphids, whitefly and spider mite on chillies, peppers and aubergine in permanent glasshouses with full enclosure.

To be applied via hydraulic boom sprayer at a rate of 16 litres product/ha in a minimum of 400 litres of water.

Crops:	Chillies, peppers and aubergine in permanent glasshouses with full enclosure.
Maximum individual dose:	16 L product per hectare.
Maximum number of treatments:	5 per crop.
Frequency of applications:	A minimum interval of 7 days must be observed between applications.
Application timing:	No restrictions.
Latest time of application:	No restrictions.

Restrictions related to these EAMUs

Treatment must only be made under 'permanent protection' situations which provide full enclosure (including continuous top and side barriers down to below ground level) and which are present and maintained over a number of years.

Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops.

To minimise airborne environmental exposure, vents, doors and other openings must be closed during and after application until the applied product has fully settled.

® FLIPPER is a registered trade mark of Alpha BioPesticides Limited

© Bayer CropScience Limited 2019.

Safety information

FLIPPER

Contains 479.8 g/litre (47.8% w/w)
fatty Acids C7-C20.



WARNING.

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

Avoid breathing vapours or spray.
Wash hands thoroughly after handling.
Use only in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do—continue rinsing.
If eye irritation persists: Get immediate medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Get medical advice/attention.
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 risk to human health and the environment, comply with the instructions for use.

IMPORTANT INFORMATION FOR USE ONLY AS A PROFESSIONAL INSECTICIDE

FLIPPER may only be used in a permanent glasshouse.

Crops:	Tomato (Permanent protection with full enclosure) Cucumber (Permanent protection with full enclosure) Strawberry (Permanent protection with full enclosure)
Maximum individual dose:	16 L product per hectare with a maximum concentration of 1.6 L per 100 L water.
Maximum number of treatments:	5 per crop.
Frequency of applications:	Apply every 7 days as required by pest pressure but do not apply more than three weekly applications consecutively.
Application timing:	Any time – No restriction.
Latest time of application:	No restriction.

Other specific restrictions:

1. Treatment must only be made under 'permanent protection' situations which provide full enclosure (including continuous top and side barriers down to below ground level) and which are present and maintained over a number of years.
2. Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops.
3. To minimise airborne environmental exposure, vents, doors and other openings must be closed during and after application until the applied product has fully settled.

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.



To access the **Safety Data Sheet** for this product scan the code or use the link below:

www.cropscience.bayer.co.uk/flippersds

or alternatively contact your supplier

GB86712016a rA1

Bayer