



TROY 480[®]

HERBICIDE

MAPP 16954

For the control of broadleaved weeds in a range of crops.

A soluble concentrate (SL) containing 480g/L (40.3% w/w) bentazone as the sodium salt.



Warning

**May cause an allergic skin reaction.
Causes serious eye irritation.**

Avoid breathing spray.

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

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

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.

IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops	Maximum individual dose (L product/ha)	Maximum number of treatments (per crop)	Latest time of application
Dwarf French beans, runner beans and field beans (winter), linseed	3 1.5	1 (single) or 2 (split dose)	Before flower buds visible.
Broad bean	3 1.5	1 (single) or 2 (split dose)	Before the 5 leaf stage for the single dose or before the crop exceeds 15cm in height and before the 7 leaf pair stage for the split dose.
Field beans (spring)	3 1.5	1 (single) or 2 (split dose)	Before the crop exceeds 15cm in height and before the 7 leaf pair stage.
Vining peas and combining peas	3	1 (single)	Before flower buds can be found enclosed in the terminal shoot.
Ornamental plant production (Narcissi)	3 1.5	1 (single) or 2 (split dose)	Not applicable.
Potato	3 1.5	1 (single) or 2 (split dose)	Before shoots exceed 15cm in height.

OTHER SPECIFIC RESTRICTIONS:

1. For ornamental plant production the use of this product is only authorised on narcissi.

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.

SAFETY PRECAUTIONS

OPERATOR PROTECTION

Wear suitable protective clothing and gloves.

Safety data sheet available for professional user on request.

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.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

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

WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

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.

Avoid release to the environment. Refer to special instructions / safety data sheet.

STORAGE AND DISPOSAL

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

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 safely.

DO NOT RE-USE CONTAINER FOR ANY OTHER PURPOSE.

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 & WARNINGS

1. Avoid spray drift onto neighbouring crops.
2. Do not apply TROY 480 to any crop that may have been subjected to stress conditions, such as herbicide or disease injury, excessive acidity alkalinity, trace element deficiency, drought, waterlogging, widely fluctuating temperatures, or physical damage to the foliage as caused by abnormal wind, rain, hail or frost.

A satisfactory leaf wax test using crystal violet marker dye, must be carried out before applying TROY 480 to peas. All the factors above can result in a reduction in the leaf wax protection.

3. Do not spray under HOT SUNNY CONDITIONS when temperatures are at or above 21°C, particularly during the mid-day period. When these conditions occur, spraying should be delayed until the evening. This is particularly important when there has been a change to hot sunny weather following a cool cloudy period.
4. Do not spray if rain or frost is expected, nor if the foliage is wet. A minimum period of 6 hours free from all rain is required after application.
5. Do not apply TROY 480 during periods of drought or unseasonably cold weather as unsatisfactory weed control may result.
6. Do not overlap spray swaths.
7. Crops must be treated at correct stage of growth to avoid danger of scorch. Apply to broad beans from 3 to 4 leaf pairs only.
8. Consult processor before using on crops for processing.
9. Not all varieties are fully tolerant. Refer to the varietal tolerance lists for each crop. The following varieties have successfully been tested:

- | | |
|---------------------|--------------------------|
| • Potatoes | King Edward, Maris Piper |
| • Linseed | Antares |
| • Early fodder peas | Baccara, Solara, Madria |

A number of varietal screens have taken place, contact your local distributor for more information.

10. Do not apply insecticides within 7 days of treatment with TROY 480.
11. TROY 480 BEFORE a post-emergence grass herbicide – Leave an interval of at least 7 days between treatments.
12. TROY 480 AFTER a post-emergence grass herbicide – Leave an interval of 14 days and carry out a leaf wax test where relevant.
13. TROY 480 must not be used on plants which are destined for seed production or for propagation.

WEED CONTROL

TROY 480 is a post-emergence contact herbicide for the control of broadleaved weeds. It is absorbed mainly by the foliage, with very little translocation. It is also absorbed by the root with translocation in the xylem providing control of broadleaved weeds in crop and horticultural situations. TROY 480 controls a great number of weeds, as shown in the table below.

Table: Susceptibility of broad-leaved weeds to 3L/ha of TROY 480

Weed	Cotyledon – 2-leaves	2 – 6leaves	Weed	Cotyledon – 2-leaves	2 – 6leaves
Black bindweed	S	MS	Field penny-cress	S	S
Black nightshade	S	S	Groundsel	S	MS
Charlock	S	S	Ivy-leaved speedwell	R	R
Cleavers	S	S	Knotgrass	R	R
Common chickweed	S	S	Pale persicaria	S	S
Common field speedwell	R	R	Pineapple weed	S	S
Common fumitory	S	MS	Red deadnettle	R	R
Common hemp-nettle	R	R	Redshank	S	S
Common orache	S	MS	Scarlet pimpernel	S	S
Common poppy	S	MS	Scented mayweed	S	S
Corn marigold	S	S	Scentless mayweed	S	S
Corn spurrey	S	S	Shepherd's purse	S	S
Crane's-bill	S	S	Small nettle	S	S
Fat hen	S	MS	Wild radish	S	S
Field forget-me-not	S	S			

S = Susceptible

MS = Moderately Susceptible

R = Resistant

The best weed control is achieved if crops are sprayed when weeds are small and actively growing, provided the crop is within the correct growth stages.

Please see the 'CROP SPECIFIC INFORMATION' section.

The split dose programme will only provide control up to the 2 leaf stage for S weeds and up to the cotyledon stage for MS weeds.

CROP SPECIFIC INFORMATION

Apply TROY 480 as a single dose in all recommended crops or as a split dose in dwarf French, runner, navy, winter field, spring field and broad beans, linseed, potatoes and ornamentals (narcissi).

It is recommended to apply the **split dose** when the weeds are small (maximum 2-leaf stage). If necessary a second application can be made to small, newly emerging weeds. A maximum of two applications can be made.

Where weeds classed as moderately susceptible constitute an important part of the weed population and have true leaves the **single dose** is necessary.

The split dose will only give acceptable control if the weeds are at cotyledon only.

The split dose has generally given better weed control and enhanced crop safety over the single dose.

Dwarf French & Runner Beans

Apply TROY 480 to runner beans when the crop has between one and two trifoliolate leaves and in dwarf French beans as soon as the crop has two foliate leaves.

Crop selectivity is partly dependent on adequate leaf wax formation. When conditions which reduce leaf wax occur the application should be delayed by at least 5-7 days to await recovery.

Apply either as a single dose, or preferably, as a split dose.

TROY 480 may cause transient scorch, which can be prolonged with applications later than the three trifoliolate leaf stage.

The following varieties of Dwarf French Beans can be safely treated:

Adora, Amira, Anne, Arena, Aurora, Bef, Bertieres, Bilbao, Bliss (Bluelect), Boreal, Brelan, Brio, Burly, Bush Blue Lake 274, Cantare, Cape, Caravelle, Carnato, Cascade, Cavalier, Celero, Checkmate, Cimbola, Corumba, Diane, Faria, Fleavor, Flo, Forum, Fran, Frigor, Gitana, Greenpak, Gresham, Groffy, Highway, Holt, Ingo, Iprin, Kent, Kingreen, Labrador, Laguna, Lake Shasta, Lancer, Lasso, Lit, Lochness, Maestro, Maradonna, Masai, Matador, Mikado, Milagro, Mirel, Modus, Mondeo, Montano, Musketeer, Mutin, Narbonne, Nassau, Nerina, Newton, Niagara, Nickel, Nomad, Odessa, Optimus, Ovation, Paulista, Prevato, Provider (Dark seeded), Rise (Peak), Rodolfo, Roma II, Romil, Rondina, Safari, Sapporo, Slenderette, Solido, Stip, Tendercrop (White seeded), Tilla, Utopia, Vaillant, Valja, Varlon, Verto, Viking, Vona and Xera.

The following varieties of Dwarf French Beans are recommended on the basis of limited (2 years) data:

Atlanta, Carlo, Fiesta, Florence, Kylian, Laureat, Magnum, Marcio, Pix, Primera, Rasada, RS 1384, Scylla, Sentry, Sigma, Tasman, Ursus and Yukon.

The following varieties of Dwarf French Beans are slightly sensitive and may exhibit more leaf scorch than other varieties but this is outgrown:

Acapulco, Amity, Arcadia*, Clyde, Delfina*, Label, Larissa, Maxima, Niki, Novores, Orca, Palermo, Piccolo, Rovita*, Salerno, Simpson, Swing, Taverna and Ventura.

*: 2 years data only

The following varieties of Runner Beans can be safely treated:

Achievement, Emergo, Enorma, Kelvedon Wonder, Kelvedon marvel, Prizewinner and Streamline.

Spring & Winter Field & Broad Beans

Apply TROY 480 as a single dose preferably for treatment of winter field bean crop, due to overwintered weeds being more advanced. Due to the sensitivity of broad beans and spring field beans, apply TROY 480 as a split dose provided that the weed and crop stage are suitable. The split dose should be applied between 2 leaf pairs and 6 leaf pairs (max height 15cm). The single dose should be applied up to 3-4 leaf pairs.

The optimum crop stage for both applications is 5 to 10 cm. If conditions are conducive to increased herbicide activity and crop scorch e.g. warm sunny conditions, tender foliage or a more sensitive variety, then the 1.5/1.5L/ha split should be used.

Crop selectivity is partly dependent on adequate leaf wax formation. Frost, wet conditions, physical damage, disease or previous sprays can all reduce leaf wax and when this occurs applications should be delayed by at least 5-7 days to await recovery.

The following varieties of Broad Beans can be treated: Beryl, Bistro, Brandy, Brunette, Danko, Diamant, Felissa, Foxton, Gold, Greeny, Jade, Litra, Metissa, Stattisa, Stereo, Threefold White, Turbulia and Verdy.

The following variety of Broad Beans is recommended on the basis of limited (2 years) data: Bailey.

The following varieties of Broad Beans have shown more sensitivity:

Albinette, Bianca, HS 500, Medes, Minica, Optica, Rowena, Scorpio* and Talia.
*2 years data

Use only the split dose treatment on these varieties.

In Broad Beans slight crop scorch can occur after spraying. This is seen as a blackening of leaf margins, especially on older leaves – all subsequent new leaves being unaffected. A temporary vigour check may also occur under some conditions. These effects generally have no influence on yield. They can, however, be more pronounced when applications are made beyond the optimum growth stage, particularly when the single dose is used and/or adverse weather conditions prevail.

Peas - Pickling, Vining & Combining Peas

Apply TROY 480 when the peas have three nodes (3 fully expanded leaves) until before the flower buds can be found enclosed in the terminal shoot. The optimum timing is when the majority of weeds have germinated, but are still at the seedling stage.

Only single dose applications are suitable for peas. Avoid application to crops which are under stress from physical damage or disease, or other factors.

A satisfactory leaf wax test using crystal violet marker dye must be performed before applying TROY 480, particularly with early drillings which tend to have less leaf wax.

Slight scorch of the leaf margins and/or hormonal twisting may occur shortly after spraying but the crop will soon recover; yield and maturity will not be adversely affected.

Do not treat forage peas varieties, or mange-tout.

The following varieties of Vining Peas can be safely treated:
Bikini, Dark Skinned Perfection, Fulmar, Gannet, Harrier, Hurst Greenshaft, Jade#, Jof, Johnsons Freezer, Legend, Markado, Markana, Polo, Progress No 6, Puget, Scout, Small Sieve Perfection, Small Sieve Freezer, Stampede, Trio, Tristar and Waverking.

The following varieties of Vining Peas are recommended on the basis of limited (2 years) data: Barle and Sancho.

The following varieties of Vining Peas are slightly sensitive:
Ambassador, Ayola# (Spring), Banff#, Bastion, Coral, Daybreak*, Dew, Early Onward#, Feltham First#, Misty, Multistar, Onward, Pennine*, Progres No 9#, Skinado, Holiday, Hunter, Hurst Beagle#, Kelvedon Wonder#, Lynx, Span# Sparkle#, Sprite#, Waverex, Wavertop and Winner*.
*2 years data

Particular care should be taken to ensure that early maturing varieties marked with # are treated at the correct growth stage, because they flower at an earlier node than later-maturing varieties. They should not be treated after the fifth expanded leaf stage.

Do not treat the varieties Carouby de Mausanne, Conquest, Danielle, Dinos, Filby, Fonado, Printana, Turon, Santa, Sherbourne or Vedette.

Linseed

Apply TROY 480 when the crop is between 2½-30cm tall, but before flower buds are visible. The optimum timing is when the majority of weeds have germinated and are still in the seedling stage.

Apply either as a single dose, or as a split dose.

TROY 480 may be used alone or following pre-emergence herbicides, provided that the crop is showing no adverse symptoms.

Narcissi

Apply TROY 480 at or after flowering but not during flower bud formation.

Apply either as a single dose or as a split dose.

The following varieties can be safely treated: Buxton, Carlton, Fortune, Golden Harvest, Larianti, Scarlet elegance and Snowball.

Potatoes

TROY 480 may be applied following a pre-emergence herbicide provided the crop is undamaged and showing no adverse symptoms of herbicide application.

Apply TROY 480 when the majority of the weeds have emerged and are at the cotyledon to seedling stage, but before most of the crop has reached a height of 15cm. Application when the crop is taller than 15cm may cause foliage scorching leading to a possible check in crop vigour and yields. Weeds can also be shielded from the spray by crop foliage with later applications.

Apply either as a single dose or as a split dose.

May be used on selected varieties of maincrop and second early potatoes, not on seed crops or first earlies.

Do not apply following a post emergence application of metribuzin.

Some leaf yellowing or slight scorch may occur under certain conditions. These effects are transient; only being present on leaves exposed to the spray. All subsequent growth is unaffected and yields are not adversely affected provided that applications are within the following guidelines.

Do not irrigate for at least 24 hours following application. In dry conditions irrigation prior to TROY 480 application can be beneficial to ensure that weeds are actively growing. Foliage must be dry before application.

Do not spray under HOT SUNNY CONDITIONS when temperatures are at or above 21°C, particularly during the mid-day period. When these conditions occur, spraying should be delayed until the evening. In general, crop foliage is more sensitive when there is a sudden change to hot sunny weather following a cool cloudy period. This sensitivity diminishes after approximately three days.

The following maincrop and second early varieties can be safely treated:

Ambo, Ausonia, Brodick*, Cara, Costello, Cultra, Erneststolz*, Marfona, Maris Piper, Maris Peer, Nadina, Navan* Obelix*. Pentland Crown, Pentland Dell, Pentland Squire, Record, Romano, Saturna*, Saxon*, Shula*, Wilja, Vekaro and Vanessa.

*2 years data

The following varieties have shown more foliage scorch than others:

Ailsa*, Picasso*, Premiere*, Balmoral*, Desiree, Estima, Hermes* and King Edward.

*2 years data

Particular attention should be paid to the crop growth stage and factors affecting crop tolerance.

Do not treat the following varieties:

Bintje, Fianna, Lady Rosetta, Morag, Morene, Rode Pipo, Russett Burbank, Sante, Shepody, Stemste and Stroma.

APPLICATION TIMING

Timing for Single Dose

TROY 480 should be sprayed when weeds are small and actively growing, provided the crop is within the correct growth stages. See individual crop growth stage limitations.

Timing for Split Dose

The optimum timing for TROY 480 for the first application is when the weeds are at the cotyledon stage. The second dose should be applied within 7-10 days of the first dose, depending on the control achieved by the initial dose or the appearance of the second weed flush.

VOLUME

Apply TROY 480 in 220-450L/ha of water for the single dose. The lowest volume should only be used when weeds are at the cotyledon - 2 leaf stage, weed density is low to moderate and crop shielding is negligible. For other situations 330-450L/ha of water is recommended. For the split dose 100-200L/ha water is recommended. The lowest volume can only be used when weeds are no larger than cotyledon stage, weed density is low to moderate and crop shielding is negligible. TROY 480 should be applied as a FINE spray (as defined by BCPC). At higher volumes, FINE or MEDIUM sprays are permissible. Adjust spray volumes and pressures according to the size and density of the weed populations and crop cover.

MIXING AND SPRAYING

Fill the tank or container with half required volume of water and add the correct amount of the product. Add the remainder of the water and continue agitation until spraying is completed.

COMPATIBILITY

Not applicable.

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable, however, as we cannot exercise control over their storage, handling, mixing or use, or the weather conditions before, during and after 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 re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. Our staff or agents cannot vary these conditions whether or not they supervise or assist in the use of such goods. Brand names used in this label may be registered trademarks of UPL Europe Ltd, or other manufacturers in which propriety rights may exist.

STORE IN A SAFE, COOL, DRY PLACE AWAY FROM FROST

To access the Safety Data Sheet for TROY 480 please use the link below or scan the code.



uk.uplonline.com/cropproductportfolio

Alternatively, contact your local supplier.

TROY 480®

MAPP 16954

For the control of broadleaved weeds in a range of crops.

A soluble concentrate (SL) containing 480g/L (40.3% w/w) bentazone as the sodium salt.

IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops	Maximum individual dose (L product/ha)	Maximum number of treatments (per crop)	Latest time of application
Dwarf French beans, runner beans and field beans (winter), linseed	3 1.5	1 (single) or 2 (split dose)	Before flower buds visible.
Broad bean	3 1.5	1 (single) or 2 (split dose)	Before the 5 leaf stage for the single dose or before the crop exceeds 15cm in height and before the 7 leaf pair stage for the split dose.
Field beans (spring)	3 1.5	1 (single) or 2 (split dose)	Before the crop exceeds 15cm in height and before the 7 leaf pair stage.
Vining peas and combining peas	3 3	1 (single)	Before flower buds can be found enclosed in the terminal shoot.
Ornamental plant	3	1 (single) or	Not applicable.
production (Narcissi)	1.5	2 (split dose)	
Potato	3 1.5	1 (single) or 2 (split dose)	Before shoots exceed 15cm in height.

OTHER SPECIFIC RESTRICTIONS:

1. For ornamental plant production the use of this product is only authorised on narcissi.

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.

SAFETY PRECAUTIONS

OPERATOR PROTECTION

Wear suitable protective clothing and gloves. Safety data sheet available for professional user on request.

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.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

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

WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

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. Avoid release to the environment. Refer to special instructions / safety data sheet.

STORAGE AND DISPOSAL

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

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 safely.

DO NOT RE-USE CONTAINER FOR ANY OTHER PURPOSE.

For Batch Number and Manufacturing Date: See Container

STORE IN A SAFE, COOL, DRY PLACE AWAY FROM FROST

UPL Europe Ltd

The Centre, 1st Floor, Birchwood Park, Warrington, WA3 6YN

Telephone: 01925 819999 Fax: 01925 817425

For 24 hour emergency information contact:

CARECHEM24 : +44 (0) 1235 239670

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