BOLT

GROUP 2 HERBICIDES

H

MAPP 21488

nufarm **HERBICIDE**

A water dispersible granule formulation containing 600 g/kg (60% w/w) tribenuron-methyl and 200 g/kg (20% w/w) florasulam for the control of cleavers and other broadleaved weeds in winter and spring barley, winter and spring oats, winter wheat, winter rye and winter triticale.

Authorisation Holder & Marketing Company

Nufarm UK Limited - Wyke Lane, Wyke, Bradford, West Yorkshire, BD12 9EJ, United Kingdom

Technical Helpline telephone number: 01274 694714

24-hour emergency telephone number: 01274 696603

PROTECT FROM FROST / SHAKE WELL BEFORE USE

Use the green foldable cardboard measuring cup to measure the relevant amount of product.

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

100 g 510012874_052026

nufarm

WARNING

UFI: XWWJ-N453-0JAE-QSQC



May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Do not breathe dust/fume/gas/mist/vapours/spray.
Get medical advice/attention if you feel unwell .
Collect spillage.
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 risk to human health and the environment, comply with the instructions for use.

Contains Tribenuron-methyl.
May produce an allergic reaction.

nufarm
SDS

NUFARM SAMPLE

IMPORTANT INFORMATION - FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crop	Maximum Individual Dose (g product/ha)	Maximum total dose (g product/ha/crop)	Latest Time of Application	Aquatic buffer zone distance (m)
Barley (winter), oats (winter), rye (winter), triticale (winter), wheat (winter)	25	25	Up to and including flag leaf ligule just visible stage (GS 39 inclusive) (see other specific restrictions)	5
Barley (spring), oats (spring)	25	25	Up to and including 2nd node detectable stage. (GS 32 inclusive) (see other specific restrictions)	5

Other Specific Restrictions:

- Applications must not be made before 15 March in the year of harvest.
- The maximum total dose of florasulam applied to a cereal crop must not exceed 7.5 g/ha.
- The maximum total dose of tribenuron applied to a cereal crop must not exceed 15 g/ha.
- This product must not be applied via hand-held equipment.

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.

NUFARM SAMPLE

SAFETY PRECAUTIONS

Operator Protection

WHEN USING DO NOT EAT, DRINK OR SMOKE

Environmental Protection

To protect aquatic organisms respect an unsprayed buffer zone 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 water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m 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 water body. 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 horizontal boom 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.

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

Storage and Disposal

STORE IN THE ORIGINAL CONTAINER in a cool, dry and well-ventilated place.

PROTECT from excessive heat and cold.

DO NOT STORE NEAR FOOD, DRINK OR ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

RINSE CONTAINER THOROUGHLY using an integrated pressure washer or by manually rinsing three times. Empty washings into spray tank and dispose of safely.

DO NOT STORE NEAR FOOD, DRINK OR ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN

RINSE CONTAINER THOROUGHLY using an integrated pressure washer or by manually rinsing three times. Empty washings into spray tank and dispose of safely.

NUFARM SAMPLE

00517383-001-004 Cyan Magenta Yellow Black

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the product label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

Restrictions

- Do not spray when crops are under stress from cold, drought, pest damage, nutrient deficiency etc.
- Do not roll or harrow 7 days before or after application.
- Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area .

Crop Failure

In the event of crop failure in the spring after an application of BOLT®, only cereals may be planted.

Weeds controlled

BOLT® is most effective when applied to small, actively growing weeds. Larger weeds may be less susceptible. For optimum performance, it is important to check the size of weeds before application.

Spring application

Rate of Use	20 g product/ha	25 g product/ha	Weed size controlled
Black bindweed	-	MS	Plants up to 2 expanded true leaves
Charlock	S	S	Plant up to 15 cm across/high
Cleavers	-	S	200 mm
Common chickweed	S	S	Flowering
Common field speedwell	-	R	Plants up to 2 expanded true leaves

NUFARM SAMPLE

Rate of Use	20 g product/ha	25 g product/ha	Weed size controlled
Common mouse-ear	-	R	Plants up to 2 expanded true leaves
Common poppy	-	S	Plants up to 6 expanded true leaves
Cornflower	-	S	Plants up to 6 expanded true leaves
Fat hen	-	MS	Plants up to 6 expanded true leaves
Field pansy	-	MS	Plants up to 2 expanded true leaves

Rate of Use	20 g product/ha	25 g product/ha	Weed size controlled
Field penny cress	S	S	Plant up to 15 cm across/high
Fools parsley	-	S	Plants up to 3 expanded true leaves
Forget me not	-	S	Plants up to 6 expanded true leaves
Fumitory	-	R	Plants up to 2 expanded true leaves
Hairy cress	-	MS	Plants up to 6 expanded true leaves

NUFARM SAMPLE

Rate of Use	20 g product/ha	25 g product/ha	Weed size controlled
Hemp nettle	-	S	Plants up to 6 expanded true leaves
Henbit dead nettle	-	MR	Plants up to 6 expanded true leaves
Ivy leaved speedwell	-	R	Plants up to 2 expanded true leaves
Knotgrass	-	S	Plants up to 6 expanded true leaves
Pineapple mayweed	S	S	Flower buds visible
Red dead-nettle	-	MR	Plants up to 6 expanded true leaves
Redshank	-	MS	Plants up to 6 expanded true leaves
Scentless mayweed	S	S	Flower buds visible
Shepherd's purse	S	S	100 mm
Volunteer oilseed rape	S	S	Before flower buds visible

S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant

NUFARM SAMPLE

Weed resistance

Tribenuron-methyl and florasulam are both systemic selective herbicide taken up by the roots and foliage and translocated to the apex of the plant.

This product contains florasulam which is an 'ALS inhibitor', also classified by the Herbicide Resistance Action Committee as 'Group 2 (previously Group B'). This product contains tribenuron-methyl which is an 'ALS inhibitor', also classified by the Herbicide Resistance Action Committee as 'Group 2 (previously Group B').

Avoid using herbicides with a single mode of action, such as ALS herbicides, in the same fields over a number of years. Growers should apply products containing herbicides with different modes of action or use sequences or tank mixes where two or more components are active against the target weeds.

Always monitor effectiveness of weed control and investigate any patches of poor control. If unexplained, contact your agronomist, who may consider a resistance test appropriate

Do not apply to weeds where target site resistance to ALS inhibiting herbicides is confirmed.

Always follow the recommendations of the Weed Resistance Action Group (WRAG) with respect to the integration of chemical and cultural control measures.

The use of cultural methods of control and herbicides with non-ALS modes of action within the cropping season and/or throughout the cropping rotation will help reduce the risk of developing resistance.

Crop specific information

BOLT® can be applied in the spring on all varieties all varieties of winter wheat, barley, oats, rye and triticale and spring barley and oats.

Spring application – Cereals

WINTER WHEAT, BARLEY, OATS, RYE & TRITICALE

Application Rate:	One application of up to 25 g product/ha will control all susceptible emerged weeds.
Application Timing:	Apply once the crop has reached 3 leaves (GS13), up to and including flag leaf ligule just visible stage (GS39 inclusive).
Water volume:	100 - 300 L water/ha. The lower volume must only be used in open crops on small weeds.

SPRING BARLEY AND SPRING OATS

Application Rate:	One application of up to 25 g product/ha will control all susceptible emerged weeds.
Application Timing:	Apply once the crop has reached 3 leaves (GS13), up to and including the second node detectable stage (GS 32 inclusive).

WSFARM SAMPLE

Water volume: 100 - 300 L water/ha. The lower volume must only be used in open crops on small weeds.

Joint application

A joint application is the use of a product in tank mixture or sequence with another product.

IMPORTANT NOTE: joint applications should only be made within the label recommendations of every product in the application. Only one other product with an ALS inhibitor mode of action may be applied to a cereal crop treated with BOLT®. However, a further application of BOLT®. or another product containing florasulam may also be made providing the maximum total dose of florasulam is not exceeded. BOLT®. may be applied in joint application to the same cereal crop with one of the following ALS products.

Product Name	Active ingredient (S)
Accurate	Metsulfuron-Methyl
Accurate Extra	Metsulfuron-Methyl + Thifensulfuron-Methyl
Ally Max SX **	Metsulfuron-Methyl + Tribenuron-Methyl
Avro SX	Metsulfuron-Methyl + Thifensulfuron-Methyl
Atlantis OD	Iodosulfuron Methyl + Mesosulfuron-Methyl
Barton WG*	Florasulam
Biplay**	Metsulfuron-Methyl + Tribenuron-Methyl
Boxer*	Florasulam
Broadway Star*	Pyroxsulam + Cloquintocet-Mexyl + Florasulam
Calibre SX	Thifensufuron-Methyl + Tribenuron-Methyl
Cameo SX**	Tribenuron-Methyl

NUFARM SAMPLE

Chimera SX	Metsulfuron-Methyl + Thifensulfuron-Methyl
Cintac	Iodosulfuron Methyl + Mesosulfuron-Methyl
Cleave*	Florasulam + Fluroxypyr
Concert	Metsulfuron-Methyl + Thifensulfuron-Methyl
Dakota*	Clopyralid + Florasulam + Fluroxypyr
Daytona	Metsulfuron-Methyl
Finish SX	Metsulfuron-Methyl + Thifensulfuron-Methyl
Galaxy*	Clopyralid + Florasulam + Fluroxypyr
GF-184*	Florasulam + Fluroxypyr
Hamlet	Diflufenican + Iodosulfuron-Methyl-Sodium + Mesosulfuron-Methyl
Hatra	Mesosulfuron-Methyl + Iodosulfuron-Methyl Sodium
Harmony M SX	Metsulfuron-Methyl + Thifensulfuron-Methyl

Horus	Mesosulfuron-Methyl + Iodosulfuron-Methyl Sodium
Hunter*	Florasulam + Fluroxypyr
Inka SX	Thifensufuron-Methyl + Tribenuron-Methyl
Jubilee SX	Metsulfuron-Methyl
Lansita	Iodosulfuron Methyl + Mesosulfuron-Methyl
Lector*	Florasulam
Lector Delta*	Diflufenican + Florasulam
Lorate	Metsulfuron-Methyl
Matera*	Florasulam + Halauxifen-Methyl
Nevada*	Florasulam + Fluroxypyr
Niantic	Iodosulfuron Methyl + Mesosulfuron-Methyl
Othello	Diflufenican + Iodosulfuron Methyl + Mesosulfuron-Methyl

NUFARM SAMPLE

Palio*	Pyroxsulam + Cloquintocet-Mexyl + Florasulam
Paramount*	Florasulam
Pelican Delta	Metsulfuron-Methyl + Diflufenican
Pennant	Metsulfuron-Methyl + Thifensulfuron-Methyl
Pinnacle	Thifensulfuron-Methyl
Presite SX	Metsulfuron-Methyl + Thifensulfuron-Methyl
Racing TF	Metsulfuron-Methyl + Thifensulfuron-Methyl
Ratio**	Thifensufuron-Methyl + Tribenuron-Methyl
Renitar*	Florasulam + Halauxifen-Methyl
Slalom*	Florasulam + Fluroxypyr
Solstice*	Florasulam
Spitfire*	Florasulam + Fluroxypyr
Starane XL*	Florasulam + Fluroxypyr
Traton SX**	Metsulfuron-Methyl, Tribenuron-Methyl
Valentia*	Florasulam + Fluroxypyr-Meptyl
Zypar*	Florasulam + Halauxifen-Methyl

* The maximum total dose of florasulam applied to a cereal crop must not exceed 7.5 g/ha.
** The maximum total dose of tribenuron-methyl applied to a cereal crop must not exceed 15 g/ha

Soil

BOLT®. is mainly absorbed by the leaves of the weeds and as such can be applied on all soil types.

Following crops

Only the following crops can be sown in the same year as a crop treated with BOLT® is harvested: cereals, oilseed rape, field beans and grass.

Vigour reductions may be seen in following crops of oilseed rape after a dry summer. This will be outgrown and will not result in yield loss.

NUFARM SAMPLE

Only the following crops can be sown in the calendar year after treatment with BOLT®: cereals, oilseed rape, field beans, grass, linseed, peas, sugar beet, potatoes, maize, clover (for use in grass/clover mixtures), carrots and vegetable brassicas as transplants.

Take extreme care to avoid drift onto crops and non-target plants outside the target area.

Water volume

Apply BOLT® in 100-300 l/ha of water. The lower volume must only be used in open crops on small weeds.

Mixing

Half fill the spray tank with clean water and add the required amount of BOLT®. Add the remainder of the water and continue agitation until spraying is completed.

When tank mixes are to be used, and unless directed otherwise, the preferred order of addition of products to the spray tank is as follows: water, dispersible granules, wettable powders, suspension concentrates, solution concentrate. Each product should be added separately to a half-filled spray tank and fully dispersed before the addition of the next product.

Apply BOLT® as a MEDIUM spray as defined by the BCPC system.

Tank cleaning procedure

To avoid subsequent injury to crops other than cereals all spraying equipment must be thoroughly cleaned both inside and outside using All Clear Extra cleaner as follows:

1. Immediately after spraying drain the tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. Rinse inside the tank with clean water and flush through booms and hoses using at least one tenth of the spray tank volume. Drain tank completely.
3. Half fill the tank with clean water and add the ammonium based cleaner at the recommended rate. Agitate and then briefly flush through the booms and hoses with the cleaning solution. Top up with water making sure the tank is completely full and allow to stand for 15 minutes with agitation. Flush the booms and hoses and drain tank completely.
4. Nozzles and filters should be removed and cleaned separately with the ammonium based cleaning solution containing 50 ml of the ammonium based cleaner per 10 litres of water.
5. Rinse the tank with clean water and flush through the booms and hoses using at least one tenth of the spray tank volume. Drain tank completely.
6. For disposal of washings follow the Code of Practice for Using Plant Protection Products. Do not spray on to sensitive crops or land intended for cropping with sensitive crops.

NUFARM SAMPLE

Note: If it is not possible to drain the tank completely, step 3 must be repeated before going on to step 4.

Company advisory information

This section is not part of the Product Label under the Plant Protection Products Regulations 2011. It provides additional advice on use of the product.

Acknowledgments

BOLT® is a registered trademark.

Conditions of supply

All goods supplied by us are of high grade and we believe them to be suitable but (as we cannot exercise any control over their mixing or use) all conditions and warranties, statutory or otherwise, as to the quality and fitness for any purpose of our goods are excluded, except in so far as such exclusion is prevented by law, and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use.

This product is to be used only in accordance with the recommendations and instructions given on the labels provided with this pack. Use in any other circumstances is entirely at users risk.

NUFARM SAMPLE