

DuPont Crop Protection Products

Product Guide 2009

THIS IS AN ANNUAL PUBLICATION

For in-season, up-to-date information please check our website at
www.gbr.ag.dupont.com

Debut[®]

beet herbicide

Important changes since last printing

Updated spray tank clean out information.

Formulation

Water-dispersible granule (dry flowable) containing 50% w/w triflusaluron-methyl.

Recommended crops

Sugar beet and fodder beet (not seed crops).

Target weeds/pest/disease

A wide range of broad-leaved weeds.

Use rate

30g/ha – generally in tank-mix.

Water volume and spray quality

80 to 150 l/ha – generally in a FINE spray.

LERAP information



LERAP B – 5m buffer zone, which can be reduced depending on dose rate, width of watercourse, sprayer type or 1m zone if ditch is dry.

Rainfastness

Rainfall within 2 hours of application may reduce the effectiveness of the treatment.

Pack

120g plastic jar, 10 per outer.

Area treated per pack

4 hectares.

MAPP No. 07804

Important information and restrictions

IMPORTANT INFORMATION

Field of use: FOR USE ONLY AS AN AGRICULTURAL HERBICIDE.

Crops: For use on sugar beet and fodder beet.

Maximum individual dose: 30 grams product per hectare.

Maximum number of treatments: Four per crop.

Latest time of application: Before the leaves of the crop meet between the rows.

Other specific restrictions:

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 PSD'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.

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.

Restrictions

Do not apply DEBUT® to crops under stress from drought, waterlogging, pest or disease attack, nutrient deficiency or any other factor reducing plant growth.

In view of the high activity of DEBUT®, special care must be taken to avoid damage by drift onto plants outside the target area, or onto ponds, waterways or ditches. Combining and vining peas are especially sensitive.

Do not apply DEBUT® to sugar beet crops grown for seed.

Following crops

After applying DEBUT® to a beet crop, only winter cereals should be sown in the same calendar year. Any crop may be sown or planted in the following (next calendar) year after a beet crop treated with DEBUT®.

Crop failure

In the event of crop failure, sow only spring barley, linseed or sugar beet within four months of application of DEBUT®, provided this agrees with the recommendations of any partner product. After four months from application, refer to the following crops section.

General information

DEBUT® is readily translocated within the weed plant, inhibiting growth within hours of treatment, thus preventing competition with the crop. Many weeds show marked colour changes as they die back after treatment, but the time taken for these symptoms to appear and final death of the weed will vary according to species and weather conditions. The full effects of treatment may not be apparent for up to three weeks. Plants not completely killed are often severely stunted and much less competitive with the crop. For effective weed control a minimum of two sprays of DEBUT® with an appropriate tank-mix partner are required.

Directions for use

Crops/varieties and timing

DEBUT® can be used on all varieties of sugar beet and fodder beet. It can be applied from peri-emergence of the crop. Do not apply DEBUT® after the leaves of the crop have met between the rows.

Seed treatments

DEBUT® mixes can be sprayed on beet treated with any UK Approved seed treatment.

Pre-emergence treatment

DEBUT® mixes can be sprayed following the manufacturer's recommended reduced rates of all UK Approved pre-emergence herbicides.

Rate of use

DEBUT® is normally recommended at 30 g/ha in combination with other herbicides, with the option of additional adjuvant oil (see Use of Adjuvants).

A typical tank-mix would be DEBUT® 30 g/ha + Venzar® Flowable 0.4 l/ha + 'contact herbicide' ± adjuvant oil.

For certain weeds, e.g. charlock and volunteer oilseed rape, field experience has shown that dose rates of DEBUT® below 30 g/ha can be used successfully in an appropriate programme of suitable tank-mixes. In a FAR-type system, DEBUT® has been included at rates of around 10 g/ha for the control of particular susceptible weed species.

All DuPont recommendations in the Product Manual are based on 30g product/ha. Use of DEBUT® at rates below 30g/ha is not supported by DuPont.

Application

For overall application use 80-150 litres of water per hectare, using suitable equipment to deliver a FINE quality spray to give good spray cover of small weeds. Good even spray cover of the weeds is essential for best results. In the case of band application, similar doses, water volumes and spray quality should be used as in overall application, but the area covered will be dependent upon the row spacing and band width. Careful calibration is essential to achieve best results.

Intervals

When DEBUT® or its tank mixes are used in sequence with most recommended graminiacides a 7 day minimum time interval should be observed between applications. A 14 day interval should elapse between DEBUT® tank mixes and tepraloxydim (Aramo).

Soils

DEBUT® can be used on all soil types. Weed control may be reduced when soil conditions are dry.

Resistance management

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered resistant to a herbicide if it survives a correctly-applied treatment at the recommended dose.

Development of resistance within a weed species can be avoided or delayed by alternating (or tank-mixing) with suitable products having a different mode of action.

Weeds controlled

DEBUT® mixes should be used as part of a well-timed, post-emergence herbicide programme. Best results are usually obtained when two DEBUT® treatments are made sequentially in a programme.

The dose rates of the mixes should be adjusted to crop growth stage and the first post-emergence applications in any programme should be applied when the weeds are at very early growth stages (peri-emergence/cotyledon).

TABLE 1: DEBUT® mixes which may be used at peri-emergence/cotyledon stages of the crop, as the start of a post-emergence programme and the susceptibility of key weeds to a programme of sprays.

	DEBUT® 30g + phenmedipham Flow 1.5 L	DEBUT® 30g + (desmedipham 40g/l) + phenmedipham 125g/l) Betanal Carrera 1.25 L	DEBUT® 30g + (desmedipham + ethofumesate + phenmedipham) Betanal Expert 0.5	DEBUT® 30g + phenmedipham Flow 1.0 L + Venzar® Flowable 0.4L	DEBUT® 30g + phenmedipham Flow 1.0 L + metamiltron 700g/l e.g. Goltix 0.5
Annual Nettle	S	S	S	S	S
Black Bindweed	MR	MR	MS	S	MS
Charlock	S	S	S	S	S
Chickweed	S	S	S	S	S
Cleavers	MS	S	S	S	S
Corn Marigold	S	S	S	S	S
Field Speedwell	S	S	S	S	S
Fat Hen	MR	MR	MR	MS	MS
Field Pansy	MR	MS	MS	S	S
Fools Parsley	MS	S	S	S	S
Fumitory	S	S	S	S	S
Groundsel	S	S	S	S	S
Hemp Nettle	S	S	S	S	S
Ivy Speedwell	S	S	S	S	S
Knotgrass	MR	MS	MS	MS	MS
Mayweed	S	S	S	S	S
Orache	MR	MS	MS	MS	MS
Pale Persicaria	S	S	S	S	S
Red Dead-nettle	S	S	S	S	S
Redshank	S	S	S	S	S
Runch	MS	S	S	S	S
Volunteer OSR	S	S	S	S	S

TABLE 2: DEBUT® compatibilities at the 3 key post-emergence crop growth stages.

* To convert phenmedipham 160g/l SC (e.g. Betanal Flow) to phenmedipham 114g/l EC, multiply the dose rate by a factor of 1.4. To convert phenmedipham 160g/l SC to phenmedipham 471g/l SC, multiply the dose rate by a factor of 0.34#. To convert phenmedipham 160g/l SC to phenmedipham 320g/l SC, multiply the dose rate by a factor of 0.5#. # Dose rates and timing are critical for these products.

Product rates in kg/ha or l/ha unless indicated otherwise Tank mix partner 1	Dose rate
Peri-emergence/cotyledon	
chloridazon 275g/L + ethofumesate 170g/l (e.g. Magnum)	1.0
chloridazon 275g/L + ethofumesate 170g/l (e.g. Magnum)	1.0
desmedipham 40g/l + phenmedipham 125 g/l (e.g. Betanal Carrera)	0.75 - 1.0
desmedipham 40g/l + phenmedipham 125 g/l (e.g. Betanal Carrera)	0.75
desmedipham 40g/l + phenmedipham 125 g/l (e.g. Betanal Carrera)	0.75
desmedipham + phenmedipham + ethofumesate (e.g. Betanal Expert)	0.5
desmedipham + phenmedipham + ethofumesate (e.g. Betanal Expert)	0.5
desmedipham + phenmedipham + ethofumesate (e.g. Betanal Expert)	0.5
phenmedipham (Approved 160g/l SC formulations) e.g. Betanal Flow	1.5*
phenmedipham (Approved 160g/l SC formulations) e.g. Betanal Flow	1.0*
phenmedipham (Approved 160g/l SC formulations) e.g. Betanal Flow	1.0*
From fully expanded cotyledon	
chloridazon 275g/L + ethofumesate 170g/l (e.g. Magnum)	1.0
chloridazon 275g/L + ethofumesate 170g/l (e.g. Magnum)	1.0
desmedipham 40g/l + phenmedipham 125g/l (e.g. Betanal Carrera)	1.5
desmedipham 40g/l + phenmedipham 125g/l (e.g. Betanal Carrera)	1.25
desmedipham 40g/l + phenmedipham 125g/l (e.g. Betanal Carrera)	1.25
desmedipham + phenmedipham + ethofumesate (e.g. Betanal Expert)	0.75 - 1.0
desmedipham + phenmedipham + ethofumesate (e.g. Betanal Expert)	0.75
desmedipham + phenmedipham + ethofumesate (e.g. Betanal Expert)	0.75
ethofumesate 94g/l + phenmedipham 97g/l ec (e.g. Twin)	1.0
ethofumesate 94g/l + phenmedipham 97g/l ec (e.g. Twin)	1.0
ethofumesate 94g/l + phenmedipham 97g/l ec (e.g. Twin)	1.0
ethofumesate 190g/l + phenmedipham 200g/l SC (e.g. Magic Tandem)	1.0
ethofumesate 190g/l + phenmedipham 200g/l SC (e.g. Magic Tandem)	0.75
ethofumesate 190g/l + phenmedipham 200g/l SC (e.g. Magic Tandem)	0.75
ethofumesate 200g/l + phenmedipham 200g/l (e.g. Powertwin)	0.75 - 1.0**
ethofumesate 200g/l + phenmedipham 200g/l (e.g. Powertwin)	0.75 - 1.0**
phenmedipham (Approved 160g/l SC formulations) e.g. Betanal Flow	1.5*
phenmedipham (Approved 160g/l SC formulations) e.g. Betanal Flow	1.5*
First pair of true leaves fully expanded –	
All mixes included at fully expanded cotyledons above plus:-	
desmedipham 40g/l + phenmedipham 125g/l (e.g. Betanal Carrera)	1.5
desmedipham + phenmedipham + ethofumesate (e.g. Betanal Expert)	1.0
ethofumesate 190g/l + phenmedipham 200g/l SC (e.g. Magic Tandem)	1.0 - 1.25
ethofumesate 190g/l + phenmedipham 200g/l SC (e.g. Magic Tandem)	1.0 - 1.25
ethofumesate 200g/l + phenmedipham 200g/l (e.g. Powertwin)	1.0**
ethofumesate 200g/l + phenmedipham 200g/l (e.g. Powertwin)	1.0**
clopyralid (200g/l SL)	0.3
clopyralid (200g/l SL)	0.3
clopyralid (200g/l SL)	0.3
clopyralid (200g/l SL)	0.3
clopyralid (200g/l SL)	0.3

** Always add minimum 0.5 l/ha adjuvant oil to these mixes.

† Where weeds which are more susceptible to metamitron (e.g. fat-hen, orache) are present in the spectrum, the inclusion of 350 g.a.i./ha metamitron with Venzar® Flowable 0.2-0.4 l/ha, from the expanded cotyledon stage of the crop, may lead to improved control.

Tank mix partner 2	Dose rate	T/M 3	T/M 4 Max No. Sprays
Peri-emergence/cotyledon			
desmedipham 40g/l + phenmedipham 125g/l (e.g. Betanal Carrera)	0.7 - 1.0		3
phenmedipham - Approved 160 g/l SC formulations (e.g. Betanal Flow)	1.5*		3
			4
metamitron 700g/l (e.g. Goltix Flowable or WG)	0.5		4
Venzar® Flowable	0.4 †		3
			4
metamitron 700g/l (e.g. Goltix Flowable or WG)	0.5		4
Venzar® Flowable	0.4 †		3
			4
metamitron 700g/l (e.g. Goltix Flowable or WG)	0.5		4
Venzar® Flowable	0.4 †		3
From fully expanded cotyledon			
desmedipham 40g/l + phenmedipham 125g/l (e.g. Betanal Carrera)	1.25 - 1.5		adjuvant oil option
phenmedipham (Approved 160g/l SC formulations) e.g. Betanal Flow	1.5 - 2.0		adjuvant oil option
metamitron 700g/l (e.g. Goltix Flowable or WG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
metamitron 700 g/l (e.g. Goltix Flowable or WG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
metamitron 700g/l (e.g. Goltix Flowable or WG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
metamitron 700g/l (e.g. Goltix Flowable or WG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
metamitron 700g/l (e.g. Goltix Flowable or WDG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
metamitron 700g/l (e.g. Goltix Flowable or WG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
First pair of true leaves fully expanded –			
All mixes included at fully expanded cotyledons above plus:-			
Venzar® Flowable	0.4 †		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
metamitron 700g/l (e.g. Goltix Flowable or WDG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
metamitron 700g/l (e.g. Goltix Flowable or WDG)	0.5		adjuvant oil option
Venzar® Flowable	0.4 †		adjuvant oil option
desmedipham + phenmedipham + ethofumesate (Betanal Expert)	0.5	Venzar® FI 0.4	adjuvant oil option
desmedipham 40g/l + phenmedipham 125g/l (e.g. Betanal Carrera)	1.25	Venzar® FI 0.4	adjuvant oil option
ethofumesate 190g/l + phenmedipham 200g/l SC (e.g. Magic Tandem)	0.75 - 1.0	Venzar® FI 0.4	adjuvant oil option
ethofumesate 94g/l + phenmedipham 97g/l EC (e.g. Twin)	1.5	Venzar® FI 0.4	adjuvant oil option
phenmedipham (Approved 160g/l SC formulations) e.g. Betanal Flow	1.5*	Venzar® FI 0.4	adjuvant oil option

Control of additional weeds

TABLE 3: Field reportage of weed control with a programme of sprays based on DEBUT® 30 g/ha + Venzar® Flowable 0.4 l/ha + appropriate 'contact' herbicide (± adjuvant oil), beginning when the annual weeds were at the cotyledon to 2 true-leaf growth stage. Perennial weeds were not larger than 15cm tall or across.

ANNUAL WEEDS

Susceptible

Amaranthus (common)

Amsinkia

Annual mercury

Black nightshade

Borage (vol)**

Carrot (vol or wild)

Cranesbills

Dead-nettles

Flixweed

Forget-me-not*

Gallant soldier

Groundsel

Lucerne (vol)

Mignonette, wild

Mustard, treacle

Nipplewort

Parsley piert

Parsnip (vol)**

Pennycress, field

Poppy

Runch (wild radish)

Scarlet pimpernel

Shepherd's needle**

Shepherd's purse

Small nettle

Sowthistle, annual

Sowthistle, smooth

Sun spurge

Moderately susceptible

Barley (vol)^

Bugloss

Buttercup, corn

Docks (seedling)

Spurrey, corn

Wheat (vol)*^

Moderately resistant

Campion, white

PERENNIAL WEEDS

Top growth of the following perennials will be suppressed

Moderately susceptible

Bindweed, field

Coltsfoot

Docks

Mint, wild

Mugwort**

Parsley, hedge

Sowthistle, perennial

Thistle, creeping

Moderately resistant

Horsetail

KEY: * Requires ethofumesate in the programme. ** Clopyralid addition important.

^ A specific graminicide application may also be required.

Control of certain key weeds

The section below indicates some key points to optimise control.

Charlock/volunteer oilseed rape:

DEBUT® is particularly active on most brassica weed species and reduced rates (15-20g/ha*) have frequently given good control in a programme of two sprays. Control is improved with early timing, but DEBUT® can control brassica weeds up to 6TL (or even larger under good growing conditions). Venzar® Flowable is a better residual partner than metamitron. Oil should be added whenever possible.

Runch (wild radish):

Because of its very hairy nature, runch has proved more difficult to control than other brassica species. For optimum control, it has been shown that DEBUT® dose rates should be maintained closer to 30g/ha, especially for the first spray. Some dose rate reduction (to 15-20g/ha) is then possible in the second spray. Venzar® Flowable is a better residual partner than metamitron. Oil should be added whenever possible.

Cleavers:

Cleavers control should begin when the cleavers have the 1st-2nd whorl. At least two DEBUT® sprays are usually required at 30g/ha, with an interval preferably no longer than 10 days. Ethofumesate is an important component of the programme. Venzar® Flowable is preferred over metamitron as the residual component. Oil should be added whenever possible.

e.g. : DEBUT® 30g + Venzar® Flowable + contact herbicide (preferably with some ethofumesate) + oil.

Creeping thistle:

Clopyralid is the key herbicide for creeping thistle. It is however costly and thistles are often patch-treated. Good control has been achieved when 30g/ha DEBUT® treatments are tank-mixed with up to 0.3 – 0.5 l/ha clopyralid. If a sequence of DEBUT® followed by clopyralid is used, a minimum of 10 days should ideally elapse between the two products.

Fat hen:

Fat hen is a very competitive weed, particularly if it germinates early. If using DEBUT[®], always include an additional residual. Metamitron 350 g.a.i./ha is probably better than Venzar[®] Flowable 0.4 l/ha in the mix. Alternatively use Venzar[®] Flowable 0.2-0.4 l/ha + metamitron 350 g.a.i./ha in the tank-mix. Following up the DEBUT[®] sprays with a phenmedipham spray will also help to control any plants that are stunted and might re-grow. For control of late-germinating fat hen, ensure sufficient residual product is applied in the programme.

Fool's parsley:

Fool's parsley is difficult to control as it can germinate over a long period. Post-emergence spray programmes should begin when the 1st true leaf is emerging. Earlier application may damage the cotyledons but leave an active growing point. DEBUT[®] mixtures, using 30 g/ha in each spray, will give good control (weeds up to 2 true leaves). Do not include metamitron in the mix due to potential antagonism. Venzar[®] Flowable 0.4 l/ha is the preferred residual partner.

Knotgrass:

Knotgrass is frequently an early-germinating weed. If knotgrass is a major problem, consider beginning the programme at the cotyledon stage, with a metamitron + oil treatment, especially if metamitron was not used pre-emergence. Follow with the DEBUT[®] programme. Desmedipham and/or ethofumesate add useful activity. Metamitron (up to 0.5 kg/ha) offers an alternative to Venzar[®] Flowable. Oil should be added whenever possible.

Nettles:

The leaves of nettles are very hairy and can be difficult to wet. Fine quality sprays are important. Combinations of DEBUT[®] 30g + Venzar[®] Flowable + contact + oil will give good results on all nettle species up to the 2 true leaf stage. Metamitron 0.5 l/ha can be substituted for Venzar[®] Flowable. Henbit dead-nettle is more difficult to control with phenmedipham. Phenmedipham + ethofumesate (\pm desmedipham) offers improved activity as the contact spray.

Orache:

Control generally similar to fat hen. Metamitron is important as part of the residual fraction.

Volunteer potatoes:

DEBUT® + clopyralid is the key herbicide combination for volunteer potato control. Clopyralid can be used at maximum total 1.0 l/ha, split into 3 or 4 doses, and should be tank-mixed with DEBUT® 30g + partner contact product + oil. The use of a contact partner itself containing ethofumesate will improve activity.

DEBUT® improves the speed of kill of the potato foliage, reduces even further the number of daughter tubers and those produced are likely to be smaller and deformed ('cracking'). This feature may render the progeny more susceptible to soft rots and thus poorer winter survival in the ground. Rapid kill of haulm helps reduce the blight risk.

Use 3 applications of DEBUT® 30g + clopyralid 0.3 l/ha + partner contact product (including ethofumesate) + oil.

The first treatment should be applied when the majority of potatoes are at 5 to 10 cm tall. Application should be repeated at 7 to 10 day intervals or as required by subsequent potato emergence.

Use of adjuvants

For improved weed control in more difficult circumstances, DEBUT® treatments can be mixed with certain Approved adjuvants such as mineral oils (those containing over 90% highly refined mineral oil) or esterified rape oils. Do not use adjuvants where the beet crop is under stress, e.g. :

- Rapid growing beet (especially between 2 and 4 leaf stage).
- Nutrient – deficient crops (especially manganese).
- Wind-blown soils.
- Frost pockets.

The dose of adjuvant should be according to the maximum temperature on the day of spraying (see below):-

Maximum temperature (degrees C) on the day of spraying	Dose of adjuvant (l/ha)
Up to 14	1.0
14 – 18	0.75
18 – 21	0.5
Over 21	No adjuvant

Compatibility

Refer to Compatibility appendix.

DEBUT® should be tank-mixed with other herbicides to widen the spectrum of activity. Products should only be tank-mixed if each product can be applied within the manufacturer's label recommendations and/or technical advice for its use.

Mixing

DEBUT® mixes well with water, but the following mixing procedure should be followed: Quarter fill the spray tank with clean water and start the agitation. In any tank-mix add DEBUT® to the spray tank first. Add the required quantity of DEBUT® either directly to the spray tank, or via an induction bowl when fitted, without prior creaming. Maintain agitation while topping up the tank and while spraying. Use the tank the same day as mixing. For mixing instructions with phenmedipham – containing products please consult relevant manufacturer's literature.

Warning

EXTREME CARE SHOULD BE TAKEN TO AVOID DAMAGE BY DRIFT OF SPRAY ONTO PLANTS OUTSIDE THE TARGET AREA OR ONTO SURFACE WATERS OR DITCHES. SPRAYING EQUIPMENT SHOULD NOT BE DRAINED OR FLUSHED ONTO LAND PLANTED WITH OR INTENDED FOR PLANTING WITH TREES OR CROPS OTHER THAN SUGAR BEET OR FODDER BEET.

Spray tank clean out

To avoid subsequent damage to crops other than sugar beet and fodder beet, thoroughly remove all traces of DEBUT® from spraying equipment immediately after spraying, using the following procedure:

1. Immediately after spraying, drain tank completely. Wash any contamination off the outside of the sprayer with clean water.
2. Rinse inside of tank with clean water and flush at least one tenth of the spray tank volume through the boom and hoses. Drain tank completely.
3. Half-fill the tank with clean water and add the correct quantity of ALL CLEAR™ EXTRA. Agitate and then flush the boom and hoses with the solution. Top up completely with water and allow to stand for 15 minutes with agitation. Again flush the boom and hoses and drain tank completely. (If it is not possible to drain tank completely, repeat step 3 before going on).
4. Remove nozzles and filters and soak in a bucket containing 50ml of ALL CLEAR™ EXTRA per 10 litres water.
5. Rinse tank again with clean water and flush at least one tenth of the tank volume through the boom and hoses. Drain tank completely.
6. For disposal of washings follow the 'Code of Practice for using plant protection products' (DEFRA publications 2006). Do not spray onto sensitive crops or land intended for planting with sensitive crops.

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 gloves 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.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

Environmental protection

Since this product is EXTREMELY DANGEROUS to fish and other aquatic life, surface waters or ditches must not be contaminated with chemical or used container.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5m 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 1m of the top of a bank of a static or flowing waterbody. Aim spray away from water.

Storage and disposal

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

EMPTY CONTAINER COMPLETELY and dispose of safely.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

DPD Regulations (CHIP 3).

DEBUT®



**DANGEROUS
FOR THE
ENVIRONMENT**

**VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM
ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.**

- This material and its container must be disposed of in a safe way.
- Use appropriate containment to avoid environmental contamination.

To avoid risks to man and the environment, comply with the instructions for use.

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

In case of emergency

For assistance on transport, storage or handling incidents, contact DuPont Emergency Response Centre, telephone: (08456) 006640. For medical emergencies, contact the National Poisons Information Service, 24-hr telephone: 0870 600 6266.

PLEASE REFER TO PRODUCT LABEL FOR FULL CONDITIONS OF APPROVAL AND SAFE USE.