## Company Name: LANDMARK OPERATIONS LIMITED Product Name: <br> APVMA Approval No: GENFARM FLUMETSULAM 800 HERBICIDE



| Label Name: | GENFARM FLUMETSULAM 800 HERBICIDE |
| :--- | :--- |


| Signal Headings: | READ SAFETY DIRECTIONS BEFORE OPENING OR USING |
| :--- | :--- |


| Constituent <br> Statements: | $800 \mathrm{~g} / \mathrm{kg}$ FLUMETSULAM |
| :--- | :--- |


| Mode of Action: |  |  |  |
| :--- | :--- | :--- | :--- |
|  | GROUP | B | HERBICIDE |


| Statement of |  |
| :--- | :--- |
| Claims: | A water dispersible granule formulation for the post-emergence and salvage control of <br> certain broadleaf weeds in winter cereals (including those undersown with clover, lucerne <br> or medics); clover, fenugreek, lathyrus, lucerne, medic, serradella and vetch (Popany only) <br> seed crops and pastures; chickpeas, field peas, lentils, maize, peanuts; and for the pre- <br> emergence control of certain broadleaf weeds in maize, pigeon peas and soybeans as <br> specified in the Directions For Use. <br> LABEL: IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USING THIS <br> PRODUCT |
| BOOKLET IMPORTANT: READ THIS BOOKLET BEFORE USING THIS PRODUCT |  |


| Net Contents: | $\#(100 \mathrm{~g})$ |
| :--- | :--- |
|  | $\# 4 \times 25 \mathrm{~g}$ |
|  | $*(500 \mathrm{~g})$ |
|  | $* 20 \times 25 \mathrm{~g}$ |
|  | 1 kg to 2 kg |

## Restraints:

> RESTRAINTS:
> DO NOT apply to plants which may be stressed (not actively growing) due to prolonged periods of extreme temperature (less than $5^{\circ} \mathrm{C}$ or greater than $30^{\circ} \mathrm{C}$ ), moisture stress (water-logged or drought affected), poor nutrition or previous herbicide treatment as reduced levels of control may result.
> DO NOT apply to plants which have suffered frosting for extended periods. Allow at least 2 days frost free prior to treatment.
> DO NOT apply post-emergence treatments if rain is likely within 4 hours.

DO NOT irrigate (any method) treated crop or pasture for 48 hours after application. DO NOT apply to crops affected by disease or by previous herbicide treatment (eg triazines or sulfonylureas).

| Directions for Use: | This section contains file attachment. <br> File Name: Genfarm Flumetsulam 800 Herbicide DIRECTIONS FOR USE.docx <br> File Size: 45657 bytes |
| :--- | :--- |

## Other Limitations:

## Withholidng Periods:

## HARVESTING WITHHOLDING PERIODS

Chickpeas, field peas, lentils, maize, peanuts, pigeon peas and soybeans: NOT REQUIRED WHEN USED AS DIRECTED

Winter cereals (barley, cereal rye, oats, triticale, wheat): DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION

GRAZING/STOCK FOOD WITHHOLDING PERIODS

Winter cereals (barley, cereal rye, oats, triticale, wheat), Chickpeas, field peas, lentils, peanuts, pigeon peas, soybeans, Popany vetch: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION
Note: This 4 week WHP covers the use of Genfarm Flumetsulam 800 tank mixed with bromoxynil ( $200 \mathrm{~g} / \mathrm{L}$ ) at $700 \mathrm{~mL} / \mathrm{ha}$ (Table 2B) on cereals.

Maize: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION

Fenugreek, lathyrus, lucerne, medic, serradella: DO NOT GRAZE OR CUT FOR STOCK FOOD OR HARVEST FOR SEED FOR 3 DAYS AFTER APPLICATION
Note: when tank mixing Genfarm Flumetsulam 800 with bromoxynil $(200 \mathrm{~g} / \mathrm{L})$ at $700 \mathrm{~mL} / \mathrm{ha}$ (Table 2B) a 2 week WHP is required.

Pastures (unless otherwise specified)
DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.
Note: when tank mixing Genfarm Flumetsulam 800 with bromoxynil ( $200 \mathrm{~g} / \mathrm{L}$ ) at $700 \mathrm{~mL} /$ ha (Table 2B) a 2 week WHP is required.

## Trade Advice:

## LIVESTOCK DESTINED FOR EXPORT MARKETS

The grazing withholding period only applies to stock slaughtered for the domestic market. Some export markets apply different standards. To meet these standards, ensure that in addition to complying with the grazing withholding period, that the Export Slaughter Interval is observed before stock are sold or slaughtered.
EXPORT SLAUGHTER INTERVAL (ESI) - 7 days:
After observing the withholding period for grazing or cutting for stock food, livestock that have been grazed on or fed treated crops should be placed on clean feed for 7 days prior to slaughter.

EXPORT ANIMAL FEED INTERVAL (EAFI) - 28 days( Fenugreek, lathyrus, lucerne, pasture and serradella only)
A minimum period of 28 days must elapse between the application of Genfarm Flumetsulam 800 Herbicide and grazing or cutting the treated pasture as stockfeed for livestock intended for export.

| General | This section contains file attachment. <br> Instructions: |
| :--- | :--- |
|  | File Name: Genfarm Flumetsulam 800 Herbicide General Instructions .docx |
| File Size: 28251 bytes |  |

## Resistance

Warning:

## RESISTANT WEEDS WARNING

Genfarm Flumetsulam 800 Herbicide is a broadleaf herbicide with no annual ryegrass activity and is a member of the triazolopyrimidine sulfonanilide (sulfonamide) group of herbicides. The product has the acetolactate synthase (ALS) inhibitor mode of action. For weed resistance management the product is a Group B herbicide. Some naturally occurring weed biotypes resistant to the product and other Group $B$ herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by this product or other Group B herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Landmark accepts no liability for any losses that may result from the failure of the product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or local Landmark representative.

## Precautions:

## Protections:

## PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Refer to MINIMUM RECROPPING PERIODS for crop rotation information. Crops susceptible to Genfarm Flumetsulam 800 include but are not limited to canola, cotton, faba beans, lupins, sorghum and sunflowers.
DO NOT flood irrigate any treated crop or pasture for 48 hours after application. Where other types of irrigation are used, for example sprinklers, DO NOT irrigate to the point of runoff for at least 48 hours after application.
DO NOT apply to waterlogged soils or if heavy rain is expected within 48 hours of application.
Dangerous to aquatic plants and susceptible crops. DO NOT contaminate dams, waterways or drains with the product or its containers.
DO NOT apply under weather conditions, such as dead calm or excessive wind, or from spraying equipment producing small droplets that may cause spray to drift onto adjacent areas, particularly wetlands, waterbodies, watercourses, susceptible crops or land to be planted with susceptible crops.

## PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under withholding periods.
Poisonous plants may become more palatable after spraying, therefore livestock should be kept out of the area until the plants have died down.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

## Storage and Disposal:

Keep out of reach of children. Store in the closed, original container in a securely locked, dry, cool, well-ventilated place, out of direct sunlight. DO NOT store near food, feedstuffs, fertilisers or seed.

FOIL BAGS: DO NOT dispose of any undiluted chemical on-site. When the foil bag is empty, shake any residual material into the spray tank. Shred and bury empty packaging
in a local authority landfill. If no landfill is available, bury the packaging below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty packaging and product should not be burnt.

HDPE ( $1 \mathrm{~kg}, 2 \mathrm{~kg}$ ) - Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.
If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

## SMALL SPILL MANAGEMENT

Sweep up material and contain in a refuse vessel for disposal in the same manner as for containers (see STORAGE AND DISPOSAL section)

## Safety Directions: Product will irritate the eyes. When handling granules avoid contact with eyes. If product in

 eyes, wash it out immediately with water. Wash hands after use.| First Aid <br> Instructions: | FIRST AID <br> If poisoning occurs contact a doctor or Poisons Information Centre. Phone: Australia 1311 <br> 26. |
| :--- | :--- |

## First Aid Warnings:

## DIRECTIONS FOR USE

TABLE 1A CHICKPEAS, FIELD PEAS, LENTILS, FENUGREEK, LATHYRUS, VETCH (POPANY only), and SERRADELLA

| CROP | GROWTH STAGES | CROP TOLERANCE | SPRAY ADDITIVES/TANK MIXES |
| :---: | :---: | :---: | :---: |
| Chickpeas | 4-6 branches (no later than 6 weeks after emergence) | Genfarm Flumetsulam 800 Herbicide usually causes some transient crop yellowing and can cause reddish discolouration and height suppression. Flowering may be delayed resulting in yield suppression. | DO NOT use any spray additives, or tank mix any other chemicals with Genfarm Flumetsulam 800 Herbicide when using on chickpeas or field peas. |
| Field Peas | 2 to 6 nodes (no later than 6 weeks after emergence) | Genfarm Flumetsulam 800 may cause transient crop yellowing and height suppression. On light soils in dry seasons flowering may be delayed resulting in yield suppression. |  |
| Lentils | 4-8 fully expanded leaves DO NOT apply later than 6 weeks after crop emergence | Genfarm Flumetsulam 800 may cause transient height reduction, crop discolouration and delayed flowering, although yields are normally unaffected. However, stress conditions after application (eg. frost, drought, nutrient deficiency, disease) may lengthen the time needed for lentils to recover. In seasons where a dry spring occurs, yields may be suppressed. Tank mixes with other products may result in growth suppression and delayed flowering which can result in yield suppression. | Uptake(TM)Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or BS-1000 ${ }^{*}$ at $200 \mathrm{~mL} / 100 \mathrm{~L}$ may be applied with Genfarm Flumetsulam 800 to lentils. |
| Fenugreek <br> Lathyrus <br> Vetch (Popany <br> only) | 3 fully expanded leaves onwards |  | Use Genfarm Flumetsulam 800 or Genfarm Flumetsulam 800 plus a wetter only. Tank mixtures with other herbicides are not recommended. |
| Serradella | 3 fully expanded leaves onwards |  | Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$ may be applied with Genfarm Flumetsulam 800 to serradella. |

TABLE 1B WEEDS CONTROLLED OR SUPPRESSED IN TABLE 1A CROPS

| WEED | WEED GR Up To Leaf No. or | OWTH StAGE <br> Up To <br> Plant size (cm) | RATE g/ha | CRITICAL COMMENTS |
| :---: | :---: | :---: | :---: | :---: |
| CONTROLLED |  |  |  |  |
| Amsinckia (Yellow burrweed) <br> Ball mustard | 6 l0 leaf | 10 cm diameter | 25 | Where recommended, use of either a wetter or Uptake Spraying Oil with Genfarm Flumetsulam 800 will provide better weed control. |
| Charlock | 8 leaf | 10 cm diameter |  | Spray charlock as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower. |
| Indian hedge mustard | 6 leaf | 5 cm diameter |  |  |
| Lupins | 10 leaf | 10 cm high |  |  |
| Marshmallow (Small flowered mallow) | 4 leaf | 10 cm diameter |  |  |
| Pheasant's eye | 8 leaf | 10 cm diameter |  |  |
| Shepherd's purse | 8 leaf | 10 cm diameter |  |  |
| Three-horned bedstraw | 6 whorls | 10 cm high |  |  |
| Turnip weed | 8 leaf | 5 cm diameter |  |  |
| Volunteer canola | 8 leaf | 10 cm diameter |  |  |
| Ward's weed | 8 leaf | 10 cm diameter |  |  |
| Wild turnip | 6 leaf | 5 cm diameter |  |  |
|  |  |  |  |  |
| SUPPRESSED |  |  |  |  |
| Capeweed (WA only) | 4 leaf | 10 cm diameter |  | Under ideal growing conditions, Genfarm Flumetsulam 800 will provide useful suppression of capeweed |
| Doublegee (Spiny emex) (WA only) | 4 leaf | 10 cm diameter |  | and doublegee. Best results will be achieved when a pre-emergence herbicide has already been used. |
| Wild radish | 4 leaf | 5 cm diameter | 25 | Under ideal growing conditions, Genfarm Flumetsulam 800 without an adjuvant will give a biomass reduction of $50 \%-70 \%$ of wild radish. Surviving plants may flower and set viable seed. Best results will occur with treatment in conditions of $>5^{\circ} \mathrm{C}$ with bright sunny conditions and use of higher water rates of 75-100 L/ha with fine-medium quality spray droplets to get excellent spray coverage. |

TABLE 2A WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE (INCLUDING THOSE UNDERSOWN WITH CLOVER, LUCERNE OR MEDICS), CLOVER, LUCERNE AND MEDIC CROPS AND MIXED GRASSES/LEGUME PASTURES

| CROP/SITUATION | GROWTH STAGES | CROP TOLERANCE | SPRAY ADDITIVES/TANK MIXES |
| :---: | :---: | :---: | :---: |
| Wheat | 3 leaf until start of jointing (Zadoks 13-31) |  | Always apply with Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or a $100 \%$ concentrate non-ionic wetting agent such as BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$. |
| Barley <br> Oats | Mid-tillering to start of jointing (Zadoks 23-31) | Transient stem shortening and crop discolouration may occur, although yields are normally unaffected. Where barley and oats are undersown, a vigorous legume component may lengthen the time needed for the cereal to recover, especially if the cereal is stressed by lack of moisture, trace element deficiency or disease. In severe cases, yields may be suppressed. | Use only with a wetting agent such as BS-1000 when either applying Genfarm Flumetsulam 800 alone or with partner products in barley and oats. |
| Stirling barley (WA only) | Apply no earlier than Zadoks 31. |  |  |
| Triticale Cereal rye | Mid-tillering to start of jointing (Zadoks 23-31) |  | Always apply with Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or a 100\% concentrate non-ionic wetting agent such as BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$. |
| Medic, lucerne, and clover seed crops, and pastures, including; Barrel medic Snail medic Spineless burr medic Subterranean clover White clover | 2 to 3 trifoliate leaves onwards | Medic, lucerne and subterranean clover - When Genfarm Flumetsulam 800 is applied at $25 \mathrm{~g} / \mathrm{ha}+$ Uptake or wetter, yield reduction may occur when treating Serena or Paraggio medic or Nungarin sub-clover. <br> DO NOT apply to lucerne seed crops less than 8 weeks before flowering. | Always apply with Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or a $100 \%$ concentrate non-ionic wetting agent such as BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$. <br> In lucerne DO NOT use with MCPA. In medics DO NOT use with MCPA. |
| Grazing lucerne - high rate | 4 trifoliate leaves onwards | Use the $50 \mathrm{~g} / \mathrm{ha}$ rate in grazing lucerne only. DO NOT apply at $50 \mathrm{~g} / \mathrm{ha}$ to lucerne used for seed production. |  |
| Fence lines, Stock camps, Stockyards, Commercial areas and pastures including medic, lucerne and clover pastures. | 2 to 3 trifoliate leaves onwards (see crop tolerance) |  | Use Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$. |
| SALVAGE SPRAY |  |  |  |
| Cereals: <br> Wheat <br> Barley <br> Oats <br> Triticale <br> Cereal rye | Flowering (anthesis) to early dough (Zadoks, 61-83) | Do not use more than $25 \mathrm{~g} / \mathrm{ha}$ |  |
| Pastures Lucerne Clover Medics | Advanced seedlings or re-growth after cutting or grazing. |  |  |

TABLE 2B WEEDS CONTROLLED IN TABLE 2A CROPS


| WEED | WEED GRO Up To Leaf No. or | OWTH STAGE Up To Plant size (cm) | RATE g/ha | CRITICAL COMMENTS |
| :---: | :---: | :---: | :---: | :---: |
| Marshmallow (Small flowered mallow) seedlings | 4 leaf | 10 cm diameter | ```25 + Uptake or wetter or 15 + wetter + 700 mL/ha bromoxynil-MCPA (200 g/L + 200 g/L), or 15 + wetter + 350 mL/ha terbutryn (500 g/L) + 700 mL/ha MCPA amine (500 g/L)``` | Genfarm Flumetsulam 800 + MCPA/terbutryn or Genfarm Flumetsulam 800 + bromoxynil-MCPA tank mixes - only use a wetter. <br> Only use bromoxyni/MCPA and terbutryn + MCPA mixes in cereals that are NOT undersown with clovers, medics or lucerne. |
|  | 10 leaf | 20 cm diameter | 25 + wetter + 2,4-DB (500 g/L) 1.5-2.5 L/ha | For older plants see Weeds Suppressed. Genfarm Flumetsulam $800+2,4$-DB tank mixes - only use a wetter. |
|  |  |  | Grazing lucerne only <br> $50+$ Uptake or wetter | Use the $50 \mathrm{~g} / \mathrm{ha}$ rate in grazing lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply at $50 \mathrm{~g} / \mathrm{ha}$ to lucerne used for seed production. |
| Paterson's curse (Salvation Jane) | 8 leaf | 10 cm diameter | $25+$ Uptake or wetter $+700 \mathrm{~mL} / \mathrm{ha}$ bromoxynil bromoxynil ( $200 \mathrm{~g} / \mathrm{L}$ ) <br> or 25 + wetter + terbutryn $(500 \mathrm{~g} / \mathrm{L}) 300 \mathrm{~mL} / \mathrm{ha}$ | In pasture, larger plants and any affected by stress or grazing prior to treatment may regrow and flower. For best results follow up with moderate grazing two weeks after application. With terbutryn, apply in a minimum spray volume of $100 \mathrm{~L} / \mathrm{ha}$ from the ground or $50 \mathrm{~L} /$ ha from aircraft. |
| Peppercress seedlings | 8 leaf | 10 cm diameter | 25 + Uptake or wetter |  |
|  | 10 leaf | 15 cm diameter | 25 + wetter + 2,4-DB (500 g/L) 1.5-2.5 L/ha |  |
| Pheasant's eye | 7 leaf | 10 cm high | 25 + Uptake or wetter |  |
| Shepherd's purse | 8 leaf | 10 cm diameter |  |  |
| Three-horned bedstraw | 6 whorls | 10 cm high |  |  |
| Turnip weed | 8 leaf | 5 cm diameter | 15 + Uptake or wetter |  |
|  | 12 leaf | 10 cm diameter | 25 + Uptake or wetter |  |
| Volunteer canola | 8 leaf | 10 cm diameter |  |  |
| Wards weed <br> Wild radish | 6 leaf | 15 cm diameter | ```25 + Uptake or wetter + 700 mL/ha bromoxynil bromoxynil (200 g/L) or 25 + wetter + MCPA amine (500 g/L) 500 \(\mathrm{mL} / \mathrm{ha}\)``` | When conditions at spraying are less than ideal (see RESTRAINTS above), or when the crop is not competitive, some radish plants may survive to flower and set viable seed. <br> DO NOT use MCPA amine in cereals undersown with clover, medics or lucerne. In lucerne DO NOT use MCPA. |
| Wild radish (cereals) | 6 leaf | 15 cm diameter | ```15 + wetter + \(700 \mathrm{~mL} /\) ha bromoxyni//MCPA ( \(200 \mathrm{~g} / \mathrm{L}+200 \mathrm{~g} / \mathrm{L}\) ) or 15 + Uptake or wetter + \(700 \mathrm{~mL} / \mathrm{ha}\) MCPA amine ( \(500 \mathrm{~g} / \mathrm{L}\) ) or \(15+\) wetter \(+700 \mathrm{~mL} /\) ha MCPA amine ( 500 \(\mathrm{g} / \mathrm{L}\) ) \(+350 \mathrm{~mL} /\) ha terbutryn ( \(500 \mathrm{~g} / \mathrm{L}\) )``` | In medics DO NOT use MCPA <br> Genfarm Flumetsulam 800 + MCPA amine tank mixes - use Uptake Spraying Oil or a wetter. <br> Genfarm Flumetsulam 800 + MCPA/terbutryn or Genfarm Flumetsulam $800+$ bromoxynil/MCPA tank mixes - only use a wetter. <br> DO NOT use MCPA amine or MCPA amine + terbutryn in cereals undersown with clover, medics or lucerne. |
| Wild turnip | 10 leaf | 10 cm diameter | 25 + Uptake or wetter |  |


| WEED | WEED GROWTH STAGE <br> Up To <br> Leaf No. or | RATE go |
| :--- | :--- | :--- | :--- | :--- |
| Ulant size $(\mathrm{cm})$ |  |  |$\quad$| CRITICAL COMMENTS |
| :--- |
| Wireweed |

## TABLE 2C WEEDS SUPPRESSED IN TABLE 2A CROPS

| WEED | WEED GROWTH STAGE |  | RATE g/ha | CRITICAL COMMENTS |
| :---: | :---: | :---: | :---: | :---: |
|  | Up To Leaf No. or | Up To Plant size (cm) |  |  |
| Buchan weed | 8 leaf | 10 cm diameter | 25 + Uptake or wetter | Genfarm Flumetsulam 800 + 2,4-DB tank mixes - only use a wetter. |
| Deadnettle | 6 leaf | 5 cm diameter | $\begin{gathered} \hline 25+\text { wetter }+2,4-\mathrm{DB}(500 \mathrm{~g} / \mathrm{L}) \\ 1.5-2.5 \mathrm{~L} / \mathrm{ha} \\ \hline \end{gathered}$ |  |
| Doublegee (Spiny emex) | 4 leaf | 10 cm diameter | $25+$ Uptake or wetter |  |
|  | 6 leaf | 15 cm diameter | Grazing lucerne only 50 + Uptake or wetter | Use the $50 \mathrm{~g} / \mathrm{ha}$ rate in grazing lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply at $50 \mathrm{~g} / \mathrm{ha}$ to lucerne intended for seed production. |
| Marshmallow (Small flowered mallow) | 5-8 leaf | 10 cm diameter | $25+$ Uptake or wetter |  |
| New Zealand spinach | 4 leaf | 5 cm diameter |  |  |
| Paterson's curse (Salvation Jane) | 8 leaf | 10 cm diameter |  |  |
| Peppercress | 10 leaf | 15 cm diameter |  |  |
| Stagger weed | 6 leaf | 5 cm diameter | $\begin{gathered} \hline 25 \text { + wetter + 2,4-DB (500 g/L) } \\ 1.5-2.5 \mathrm{~L} / \mathrm{ha} \\ \hline \end{gathered}$ | Genfarm Flumetsulam 800 + 2,4-DB tank mixes - only use a wetter. |
| Wild radish | 4 leaf | 5 cm diameter | 25 + Uptake or wetter |  |

TABLE 3 SALVAGE SPRAY IN WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE, MIXED GRASS/LEGUME PASTURES, LUCERNE, CLOVER AND MEDICS

| WEED | WEED GROWTH STAGE | RATE g/ha | CRITICAL COMMENTS |
| :---: | :---: | :---: | :---: |
| Wild radish Turnip weed Paterson's curse | Early flowering of the youngest weeds to early pod formation of the oldest weeds | 25 or 50 <br> + Uptake or wetter Use $50 \mathrm{~g} / \mathrm{ha}$ only in established grazing lucerne clover, medic and legume/grass pastures | Use Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or wetting agent such as BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$. <br> For prevention of wild radish and turnip weed seed set, apply in a minimum spray volume of $\mathbf{1 0 0} \mathrm{L} / \mathrm{ha}$ from the ground or $50 \mathrm{~L} / \mathrm{ha}$ from aircraft. <br> Some re-growth may occur when wet conditions prevail after treatment. Do not use this technique if you have already applied a Group B herbicide to the crop or pasture this season. Only use this salvage spray technique with Genfarm Flumetsulam 800 once per cropping cycle to minimise the development of herbicide resistance. If you suspect herbicide resistance in broadleaved weeds do not use this technique. <br> DO NOT use a Genfarm Flumetsulam 800 salvage spray in pastures for seed production. <br> WARNING: Weeds that have not started to flower at application time may not be controlled by the salvage spray technique. For wild radish, time treatment to coincide with green, soft pods prior to embryo maturation in seeds. Squeeze pod between finger nails to see if any "green/white seeds" are present. Best time to treat is before seeds are visible. <br> Use $50 \mathrm{~g} / \mathrm{ha}$ only in established grazing lucerne clover, medic and legume/grass pastures. |

TABLE 4 AGRICULTURAL NON-CROP AREAS

| WEED | WEED GROWTH STAGE | RATE | CRITICAL COMMENTS |
| :--- | :--- | :--- | :--- |
| Caltrop <br> Capeweed | Rosette stage prior to <br> running up to flower | Spot spray: $25 \mathrm{~g} / 100 \mathrm{~L}$ | Apply to actively growing rosettes. To ensure complete coverage, spray to the point of runoff. Use Uptake <br> Spraying Oil at 500 $\mathrm{mL} / 100 \mathrm{~L}$. |
| (Small flowered <br> mallow) <br> (suppression) <br> Paterson's curse <br> Salvation Jane) |  |  |  |
| Wild radish |  |  |  |

TABLE 5A SEED CROPS (Tasmania only): SUBTERRANEAN CLOVER, RED CLOVER, WHITE CLOVER, ARROWLEAF CLOVER AND LUCERNE

| Crop | Growth Stages | Crop Tolerance | Spray Additives/Tank Mixes |
| :---: | :---: | :---: | :---: |
| Seed crops of Subterranean clover Red clover White clover Arrowleaf clover Lucerne | 1 to 3 trifoliate leaves onwards | DO NOT apply to lucerne or clover seed crops less than 8 weeks before flowering. <br> DO NOT apply at $40 \mathrm{~g} / \mathrm{ha}$ to lucerne intended for seed production. | Use Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or a wetting agent such as BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$. <br> In clover and lucerne Genfarm Flumetsulam 800 may be tank-mixed with 2,4-DB and/or bromoxynil at their respective label rates for complete control of suppressed weeds. |

## TABLE 5B WEEDS CONTROLLED OR SUPPRESSED IN TABLE 5A CROPS

| WEED | WEED GROWTH StAGE | RATE g/ha | CRITICAL COMMENTS |
| :---: | :---: | :---: | :---: |
| WEEDS CONTROLLED |  |  |  |
| Charlock | Up to $31 / 2$ leaf stage | 25 + Uptake or wetter | Use Uptake Spraying oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ or wetting agent such as $\mathrm{BS}-1000$ at $200 \mathrm{~mL} / 100 \mathrm{~L}$. |
| Fat hen <br> Lesser swinecress <br> Mustards <br> Shepherd's purse <br> Wild radish <br> Wild turnip | Beyond $3 ½$ leaf stage and up to 10 leaf stage | 40 + Uptake or wetter |  |
| WEEDS SUPPRESSED |  |  |  |
| Capeweed Chickweed Fumitory Spurrey Wireweed | Beyond $3^{1 ⁄ 2} 2$ leaf stage and up to 10 leaf stage | 40 + Uptake or wetter | In clover and lucerne, seedlings of these weeds will be suppressed with Genfarm Flumetsulam 800 alone. <br> In clover and lucerne, Genfarm Flumetsulam 800 may be tank-mixed with $2,4-\mathrm{DB}$ and/or bromoxynil at their respective label rates for complete control of suppressed weeds. Only use a wetting agent at $200 \mathrm{~mL} / 100 \mathrm{~L}$ with these tankmixes. |

TABLE 6A SOYBEANS, LUCERNE, MAIZE, PEANUTS AND PIGEON PEAS

| Crop | Growth Stages | Application methods | Spray Additives/Tank Mixes | Crop Tolerance |
| :---: | :---: | :---: | :---: | :---: |
| Maize | Post-plant preemergence (PPPE) | Apply Genfarm Flumetsulam 800 after planting and before emergence of crop and weeds. Apply to moist soil only. | May be tank mixed with pendimethalin. |  |
|  | Post-emergent Up to 8 leaf stage |  | Apply with Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ spray volume or with a $100 \%$ concentrate non-ionic wetter such as BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$. | Some transitory crop yellowing and height suppression should be expected but yields will be unaffected. |
| Soybean | Pre-plant Incorporated (PPI) | Incorporate into the soil within 4 hours by making two passes in opposite directions using a combine with trailing harrows or similar equipment, to ensure thorough incorporation. | May be tank mixed with Trifluralin 480 or pendimethalin. |  |
|  | Incorporated By Sowing (IBS) | Ensure the planting operation is done within 4 hours of application, using a combine with trailing harrows or similar equipment, to ensure thorough incorporation. | May be tank mixed with Trifluralin 480 or pendimethalin. |  |
|  | Post-plant Preemergent (PPPE) | Apply Genfarm Flumetsulam 800 after planting and before emergence of crop and weeds. Apply to moist soil only. | May be tank mixed with pendimethalin. |  |
| Lucerne | Post-emergent Up to 6 trifoliate leaf stage |  | DO NOT apply at $50 \mathrm{~g} / \mathrm{ha}$ to lucerne intended for seed production. <br> Apply with Uptake Spraying Oil at $500 \mathrm{~mL} / 100 \mathrm{~L}$ spray |  |
| Peanuts | Post-emergent Up to 6 leaf stage |  | volume or with a $100 \%$ concentrate non-ionic wetter such as BS-1000 at $200 \mathrm{~mL} / 100 \mathrm{~L}$. |  |
| Pigeon pea (GM Cotton refugia) | Post-plant preemergence (PPPE) | Apply Genfarm Flumetsulam 800 after planting and before emergence of crop and weeds. Apply to moist soil only. Results will be improved by light irrigation or rain to incorporate. | May be tank mixed with Trifluralin 480 or pendimethalin |  |

TABLE 6B WEEDS CONTROLLED OR SUPPRESSED IN TABLE 6A CROPS

| WEED | WEED GROWTH STAGE | RATE g/ha | CRITICAL COMMENTS |
| :---: | :---: | :---: | :---: |
| WEEDS CONTROLLED |  |  |  |
| Annual ragweed <br> Boggabri Weed <br> Fat Hen <br> Wild Radish (IBS or PPPE only) | Pre-emergent | 25 or 50 | Cotton (including Roundup Ready Cotton) - may be banded ( $>40 \%$ ) over the row or broadcast). <br> WEED CONTROL: <br> Minimum spray volume $150 \mathrm{~L} / \mathrm{ha}$ for optimum results. |
| Caltrop Fat hen Turnip weed Wild Radish | Post-emergent Up to 4 leaf | 25 or 50 + Uptake or wetter |  |
| Volunteer cotton (including Roundup Ready ${ }^{\text {® }}$ Cotton) | Pre-emergence | 50 | Minimum spray volume $150 \mathrm{~L} / \mathrm{ha}$ for optimum results. <br> In pre-emergent situations use the higher rate for longer soil residual effect and better suppression of more tolerant weeds (see weeds suppressed). In post-emergent situations use $25 \mathrm{~g} / \mathrm{ha}$ on weeds up to 2 leaf stage and 50 $\mathrm{g} / \mathrm{ha}$ on larger weeds up to 4 leaf stage and where more residual control is required. |
| WEEDS SUPPRESSED |  |  |  |
| Black pigweed Bladder ketmia Caltrop Cobbler's-pegs | Pre-emergent | 25 or 50 |  |
| Annual ground cherry <br> Anoda weed <br> Bladder ketmia <br> Boggabri weed <br> Fierce thornapple (Qld only) <br> Red pigweed <br> Wild gooseberry | Post-emergent Up to 4 leaf | 25 or 50 + Uptake or wetter |  |

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

## GENERAL INSTRUCTIONS

Genfarm Flumetsulam 800 granules in water soluble bags readily disperse in water and will do so once added to fast moving water. Maintain agitation at all times, including during mixing as well as spraying. Only mix sufficient spray solution for immediate use and avoid storing.

## MIXING

## Spray rigs with premix hoppers

For spray rigs that have a drop down chemical induction hopper, three-quarter fill this hopper with water and have the rinsing sprinkler operating. Add the Genfarm Flumetsulam 800 water soluble bags and when they are dissolved and the granules are dispersed, transfer this batch into the quarter filled main tank. Continue to rinse the hopper until the entire product has washed through.

## Spray rigs with limited bypass agitation

When Genfarm Flumetsulam 800 is added to the spray tank in water soluble bags, for spray rigs that have limited bypass agitation, then as for most granulated formulations, predisperse the Genfarm Flumetsulam 800 in a bucket before adding them to the main tank. Add Genfarm Flumetsulam 800 while stirring until the granules have dispersed.

## Tankmixes - this order should be followed:

1. Quarter fill the spray tank and agitate
2. Add Genfarm Flumetsulam 800 using the mixing procedure above
3. Add Genfarm Haloxyfop 520 if to be used
4. Half fill the spray tank
5. Add wettable powders, dry flowables, suspension concentrates, soluble liquids and/or emulsifiable concentrates
6. Add Uptake ${ }^{\circledR}$ Spraying Oil when half full
7. Other adjuvants add according to their label
8. Add water to fill the spray tank

## APPLICATION

- Ground Application: Apply Genfarm Flumetsulam 800 in 50 to 150 litres of water per hectare through a calibrated sprayer that delivers at least medium quality spray as defined by the American Society of Biological Engineers Standard S572.
- DO NOT apply Genfarm Flumetsulam 800 under conditions likely to cause drift onto waterways, susceptible crops or land to be planted with susceptible crops. Unsuitable conditions are dead calm, excessive wind and/or small droplets.
- Best results are achieved where applications are made on warm (greater than $5^{\circ} \mathrm{C}$ ), sunny days applying more than $50 \mathrm{~L} / \mathrm{ha}$ of total spray volume (preferably more than 75 $\mathrm{L} / \mathrm{ha}$ ) and where spray coverage is maximised.


## COMPATIBILITY

- Always allow 7 days between application of a grass herbicide and Genfarm Flumetsulam 800 in chickpeas and field peas.
- In lentils, adjuvant, broadleaf or grass herbicide, insecticide and foliar fertiliser tank mixes may result in transient height reduction, crop discolouration and delayed flowering, although yields are normally unaffected. However, stress conditions after application (eg. frost, drought) may lengthen the time needed for lentils to recover and in years where a dry spring occurs, yields may be suppressed.
- Genfarm Flumetsulam 800 is compatible with the following:


## Adjuvants

Uptake ${ }^{\circledR}$ Spraying Oil, Hasten $®$ Spray Adjuvant, BS-1000

Broadleaf herbicides

| Atrazine | Diuron (liquid or wettable <br> granule) | Genfarm Imazethapyr 700 <br> WG Herbicide |
| :--- | :--- | :--- |
| Basagran ${ }^{\circledR}$-Herbicide | Genfarm Clopyralid 750 SG <br> Herbicide <br> Genfarm Clopyralid 300 <br> Herbicide | Genfarm Fluroxypyr 200 <br> Herbicide |
| Bromoxynil | MCPA amine | Pendimethalin 330 Herbicide |
| $2,4-$ DB | MCPA ester | Terbutryn |
| Diflufenican (lentils and field <br> peas only) | MCPA sodium salt | Genfarm McPik 242 Cereal <br> Herbicide |
| Genfarm Diflu-Brom <br> Selective Herbicide | Metsulfuron | Trifluralin 480 |

## Grassweed herbicides

| Clethodim (lentils only) | Simazine |  |
| :--- | :--- | :--- |
| Genfarm Diclofop methyl 375 <br> Selective Herbicide (ryegrass <br> only) | Trifluralin 480 | Genfarm Fluroxypyr 200 <br> Herbicide |
| Paraquat | clodinafop | Genfarm Haloxyfop 520 <br> Herbicide |
| Wildcat ${ }^{\circledR}$ Selective Herbicide (wild oats only) |  |  |

## Insecticides

Dimethoate, esfenvalerate (lentils only), Chlorpyrifos 500 Insecticides, omethoate

## Fungicides (lentils only)

Carbendazim, chlorothalonil, Dithane ${ }^{\circledR}$ Rainshield ${ }^{\circledR}$ Neo Tec

## Foliar Fertilisers

Broadacre zinc (lentils only)
${ }^{\circledR}$ Registered Trademarks

## CLEANING SPRAY EQUIPMENT

After using Genfarm Flumetsulam 800, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Drain the tank and clean any filters in the tank, pump, lines and nozzles.

- To rinse. After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.
- To decontaminate. Before spraying sensitive crops (which include canola, cotton, faba beans, lupins, sorghum and sunflowers), wash the tank and rinse the system as above. Quarter fill the tank and add an alkali detergent at $500 \mathrm{~mL} / 100 \mathrm{~L}$ of water or the powder equivalent at
- $500 \mathrm{~g} / 100 \mathrm{~L}$ ) and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the
system with clean water and allow to drain. Chlorine based cleaners are not recommended.
Nufarm Tank and Equipment Cleaner ${ }^{\circledR}$ is not recommended.
Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and watercourses.


## MINIMUM RECROPPING PERIODS:

Genfarm Flumetsulam 800 is broken down in the soil by microbial activity. Warm, moist soil conditions favour highest microbial activity and quickest residue breakdown. For the recropping periods NNSW \& Qld refers to summer dominant rainfall areas, where crops are grown on deep black earth soils (vertisols), with no impermeable sub-horizon in the top 30cm. SNSW, Vic, Tas, SA and WA refers to winter dominant rainfall areas on soils with no impermeable sub-horizon in the top 30 cm . Also see the comments on rainfall and soil type below.

| Crop | Rate (g/ha) | Region |  |
| :--- | :---: | :---: | :---: |
|  |  | NNSW, Qld | SNSW, Vic, Tas, SA, <br> WA |
| Cereal rye, medics, triticale, <br> wheat, maize or soybeans | 25 or 50 | May be planted at any <br> time after Genfarm <br> Flumetsulam 800 <br> application | May be planted at any <br> time after Genfarm <br> Flumetsulam 800 <br> application |
| Barley, chickpeas, clover, field <br> peas, lucerne, oats and peanuts | 25 | 3 months | 3 months |
| Cotton, sorghum or sunflowers | 50 | 6 months | 9 months |
|  | 25 | 6 months | - |
| Canola, faba beans, fenugreek, <br> lathyrus, lentils, lupins, <br> serradella or Popany vetch | 25 | 9 months | - |
|  | 50 | 6 months | 9 months |

Rainfall - is required to maintain soil wetness for at least one week over the warm months to enable microbial degradation of herbicide residues to allow safe planting of sensitive crops. For SNSW, Victoria, Tasmania, SA and WA a minimum of 25 mm and preferably 50 mm or more rain must have fallen over the warm months of the year. For NNSW and Qld a minimum of 50 mm and preferably 100 mm rain or more must have fallen over the warm months of the year.

Soil type - on shallow, duplex, low organic matter soils with an impermeable subhorizon within the root zone ( $\mathbf{3 0} \mathrm{cm}$ deep or less) and alkaline surface soil, sensitive crops should NOT be planted until 2 years after application of Genfarm Flumetsulam 800 at either 25 or $\mathbf{5 0} \mathrm{g} / \mathrm{ha}$. (For crops grown in NNSW and QId on soils other than vertisols, call Landmark or your local reseller for more advice).

