

# Technical Information Sheet

**Manhattan<sup>®</sup> is a post-emergence herbicide for use on winter cereals (wheat, rye, triticale and spelt) for the control of grass weeds and a wide range of broad-leaved weeds**

**Key facts**

|                                 |                                                                                                                                                              |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Registration Number:    | PCS No. 07170                                                                                                                                                |
| Active Ingredient:              | 52.1 g/kg of halauxifen-methyl, 37.5 g/kg of florasulam, 187.5 g/kg of pyroxsulam and 266 g/kg of cloquintocet acid (safener) (HRAC Group 4 & 2 Herbicides)  |
| Pack Size:                      | 500 gms (treats 5 ha)                                                                                                                                        |
| Formulation:                    | Water Dispersible Granule (WDG)                                                                                                                              |
| Crops:                          | Winter wheat, winter rye, winter triticale and winter spelt                                                                                                  |
| Maximum Individual Dose:        | <b>100 g/ha &amp; adjuvant</b>                                                                                                                               |
| Maximum Number of Applications: | 1 per crop                                                                                                                                                   |
| Application Timing:             | Autumn or spring from GS12–32                                                                                                                                |
| Water Volumes:                  | 100-400 l/ha. Higher volumes recommended when the crop is dense.                                                                                             |
| Spray Quality:                  | Medium as defined by BCPC                                                                                                                                    |
| Nozzles:                        | Standard and low drift nozzles                                                                                                                               |
| Buffer Zone:                    | Respect an unsprayed 10 m buffer zone to surface water bodies. Buffer zone can be reduced to 3 m if 75% drift reducing nozzles are used according to STRIPE. |
| Rainfastness:                   | 1 hour                                                                                                                                                       |

**Key benefits**

- Excellent broad-spectrum grass weed control, including brome, ryegrass and wild oats.
- Controls a range of difficult broad-leaved weeds.
- Can be used in joint application with a wide range of ALS-inhibitor broad-leaved weed herbicide products.
- Physically compatible with a wide range of herbicides, insecticides and trace elements making it an excellent tank mix partner.

**Best use advice**

- Apply Manhattan at 100 g/ha with a supported adjuvant:
  - 95% w/w oil, rapeseed fatty acid: Phase II, Super Rapeeze or Toil
  - Non-ionic adjuvant
- Brome control is best achieved from GS11-GS24 (optimum being GS11-13).
- Ryegrass and Wild Oat control is best achieved from GS11-GS29 (optimum being GS11-13).
- Ensure Manhattan is applied during periods of active growth and don't apply to crops or weeds under stress.
- Manhattan can sometimes induce slight transient crop yellowing, this will grow away and has no impact on yield.
- To avoid subsequent injury to crops (other than winter wheat, spelt, rye and triticale), immediately after spraying Manhattan, all spraying equipment must be thoroughly cleaned both inside and out using a proprietary tank cleaner such as All Clear Extra spray cleaner at 0.5 % v/v.

## Following crops/Crop failure

- No following crop restrictions.
- In the event of crop failure, the following crops can be drilled after a minimum interval of 4 weeks: spring cereals and maize. It is important to consider all herbicides used on the treated field before deciding which new crop to sow.

## Tank mixes

A full range of tank mix partners supported with Manhattan can be found on our website at <https://www.corteva.ie/tools-and-advice/tank-mixes.html> or for more information call or email the Technical hotline.

## Weed spectrum

- Always use Manhattan in combination with an approved adjuvant

| Weeds                     | 100 g/ha + adjuvant  | Weeds                   | 100 g/ha + adjuvant        | Weeds                           | 100 g/ha + adjuvant                         |
|---------------------------|----------------------|-------------------------|----------------------------|---------------------------------|---------------------------------------------|
| <b>Brome spp.</b>         | <b>S up to GS24</b>  | Fool's parsley          | S up to 4TL                | <b>Red dead nettle</b>          | <b>S up to full flowering (up to 18 cm)</b> |
| Bindweed, black           | <b>MS up to 4TL</b>  | Fumitory                | S to B4 flowering          | Redshank                        | S up to 4TL                                 |
| Black nightshade          | S up to 4TL          | Groundsel               | S up to flowering          | <b>Ryegrass</b>                 | <b>S up to GS29</b>                         |
| Bur chervil               | S up to 8TL          | Hedge mustard           | S up to 4TL                | Shepherd's purse                | S up to 6TL                                 |
| Charlock                  | S up to 6TL          | Hemp nettle             | S up to 4TL                | Shepherd's needle               | S up to 8TL                                 |
| <b>Chickweed (common)</b> | <b>S up to 10 cm</b> | Knotgrass               | S up to 2TL                | <b>Speedwell (common field)</b> | <b>S to B4 flowering</b>                    |
| Cleavers                  | S up to 15 cm        | <b>Loose silky bent</b> | <b>S up to GS29</b>        | <b>Speedwell (ivy-leaved)</b>   | <b>S to B4 flowering</b>                    |
| Cranesbill/ Geranium      | S up to 8TL          | <b>Mayweed</b>          | <b>S up to 12 cm</b>       | Small nettle                    | S up to 4TL                                 |
| Docks (seedling)          | S up to 15 cm        | <b>Oats (wild)</b>      | <b>S up to GS29</b>        | Volunteer beans                 | S up to BFBV                                |
| Fat hen                   | S up to 10 cm        | Pale persicaria         | S up to 4TL                | Volunteer sugar beet            | S up to 4TL                                 |
| Field pansy               | S up to 4TL          | Parsley piert           | S up to 4TL                | Wild radish (runch)             | S up to 6TL                                 |
| Forget-me-not             | S up to 6TL          | <b>Poppy</b>            | <b>S up to 8TL (10 cm)</b> |                                 |                                             |

### Key:

Label weeds in **bold**. TL – True leaves, B4 – before flowering, BFBV – before flower buds visible

Non-label weed information based on anecdotal or limited data and is only indicative and should not be considered as a recommendation for use on the part of Corteva Agriscience. The user assumes full responsibility for use on the weeds.

|  |             |  |                        |
|--|-------------|--|------------------------|
|  | Susceptible |  | Moderately susceptible |
|--|-------------|--|------------------------|