

## Product use stewardship

Aminopyralid on treated foliage that is grazed by animals will pass through the digestive system and remain active in the manure. The residues in manure may cause injury to broadleaf plants including vegetables and ornamentals. The Stinger label has specific statements regarding management of animal waste and compost made from animal waste. Aminopyralid residues on treated foliage that are used to produce hay, silage or mulches may also remain active and potentially damage susceptible plants. Please refer to the Stinger label for management statements

## Environmental toxicity

Aminopyralid and its salts are not toxic to bees, earthworms, terrestrial arthropods, fish or aquatic invertebrates and have low toxicity to aquatic plants. Metsulfuron-methyl is not toxic to birds, fish or aquatic invertebrates, has very low toxicity to bees and earthworms, and is highly toxic to algae and aquatic plants.

The ingredients in Stinger will damage aquatic plants if the product contaminates water bodies.

If using an adjuvant and treating plants in flower check the adjuvant label or SDS for bee toxicity advice.

Aminopyralid and metsulfuron-methyl do not accumulate in aquatic or terrestrial food chains.

## Poisonous plants

Stinger is not toxic to grazing livestock, however poisonous plants may become more palatable after spraying with herbicides and stock should be kept away from these plants until they have died down.

## Burning treated vegetation

Aminopyralid and metsulfuron-methyl residues in plant tissue are destroyed when treated vegetation is cleared by burning.

## Human health and safety

Stinger has low toxicity if swallowed, and small amounts swallowed incidentally as a result of normal handling are not likely to cause injury. The product may cause eye and skin irritation. When the correct personal protection equipment is worn (see Safety Directions on the product label), accidental exposure to Stinger Herbicide should not result in any harm to the user.

Aminopyralid and metsulfuron-methyl are not carcinogenic (do not increase tumors), are not mutagenic (do not damage genetic material) and are not teratogenic (do not harm the unborn).

## Conclusion

The behaviour of Stinger Herbicide in the environment and the low toxicity to mammals and wildlife indicates no undue hazards when applied for the control of weeds. However, like all agricultural chemicals it should be applied in a responsible manner as to minimise off-target drift of spray and contamination of waterways.

Throughout Australia there are great variations in climate soil type, vegetation, topography and land use. All of these have an effect on the impact of chemicals in the environment.

**Any persons having questions on the possible effects of any Corteva Agriscience product should contact our customer service team, toll free on 1800 899 147.**



# Stinger® Herbicide

Health and safety profile



**Stinger®**  
**HERBICIDE**



**Stinger® Herbicide** is used in Australia for control of a wide range of brush and broadleaf weeds in pasture and non-agricultural areas. Application can be by high volume handgun, boom, aerial and low volume high-concentrate application techniques.

This brochure is a general guide on the toxicity and behaviour of Stinger in the environment when used for weed control. Detailed information on rates of application and directions for use are set out on the product label. The Woody Weed Control guide is another useful source of information.

## Chemical characteristics

Stinger is a water soluble granule formulation containing 375 g/kg aminopyralid present as the potassium salt and 300 g/kg metsulfuron-methyl. The aminopyralid potassium salt rapidly converts to the parent acid once in soil, water, plants and animals so it is the properties of this chemical which is important in assessing health and environmental behaviour.

Aminopyralid is a member of the pyridine carboxylic acid family of chemistry. This class of chemistry is known to possess auxin-like properties, where the herbicide binds to protein receptor sites that normally regulate plant processes. Aminopyralid rapidly absorbed by the leaves and roots, moves systemically throughout the target plant in the xylem and phloem and accumulates in the meristematic tissue, where it deregulates growth metabolic pathways. The disruption of these pathways causes deregulated plant growth and symptoms in susceptible plants such as thickened, curved and twisted shoots, stems and leaves, and cupping and crinkling of leaves.

Metsulfuron-methyl is a sulfonylurea herbicide which also moves systemically throughout the target plant after absorption via the roots and foliage. It is an acetolactate synthase inhibitor (ALS inhibitor) which acts by stopping biosynthesis of certain essential amino acids, preventing cell division and plant growth.

Aminopyralid and metsulfuron-methyl are not volatile, however low rates of Stinger in the spray mixture will damage nearby sensitive plants and the product must be used responsibly to minimise off-target drift.

## Environmental fate characteristics

### Behaviour in soil

Aminopyralid is somewhat persistent in soil with average half-life of about 35 days. Breakdown is via microbial degradation. Field experiments show it has limited potential for mobility in the soil.

Metsulfuron-methyl is moderately persistent in soil with an average half-life of about 52 days, with degradation faster in acidic soils and breakdown from chemical hydrolysis and microbial degradation. Metsulfuron-methyl has the potential to leach, particularly in alkaline soils.

### Behaviour in surface water

In the presence of water aminopyralid is broken down quickly by sunlight and micro-organisms. Half the aminopyralid will dissipate in less than one day. Metsulfuron-methyl breaks down slowly in surface water.



**CORTEVA™**  
agriscience

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