

Metsulfuron-methyl

Metsulfuron-methyl is a residual sulfonylurea compound, used as a selective pre- and post-emergence herbicide for broadleaf weeds and some annual grasses. It is a systemic compound with foliar and soil activity, and it works rapidly after it is taken up by the plant. Its mode of action is by inhibiting cell division in the shoots and roots of the plant, and it is biologically active at low use rates. It is very effective on weeds that include bulbs or tubers.

Metsulfuron-methyl is commonly used in forestry situations. It is usually used together with other herbicides that control the weeds not susceptible to metsulfuron. Metsulfuron-methyl also controls susceptible weeds in cereals, where selectivity is due to rapid metabolism within the cereal plants.

Product Trade Names

Products registered for use in Tasmania are:

Aim	Brushoff	Metmac
Ally	Associate	Parti-San
Met	Bushwacker	Metsun
Esteem	Brushkiller	Metsulfuron
Lynx	Sum-Met	

Ecological Effects

Metsulfuron-methyl has a low toxicity to birds, aquatic organisms (including fish), bees, and earthworms

Environmental Fate

The breakdown of metsulfuron-methyl in soils is largely dependent on soil temperature, moisture content, and pH.(acidity / alkalinity) The chemical will degrade faster under acidic conditions, and in soils with higher moisture content and higher temperature.

The chemical has a higher mobility potential in alkaline soils, due to its higher solubility. Metsulfuron-methyl is stable to photolysis, but will break down in ultraviolet light. It is also stable to hydrolysis in neutral and alkaline conditions.

Metsulfuron-methyl is rapidly taken up by plants at the roots and on foliage. The chemical is translocated throughout the plant, but is not persistent. In tolerant plants, it is broken down to non-herbicidal products.

Human Toxicity

Metsulfuron-methyl has very low toxicity in mammals. Systemic poisoning is unlikely unless large quantities have been ingested. The chemical is broken down quickly and eliminated from the body.

Based on tests conducted on laboratory animals, the following may be concluded:

- No adverse effects on reproduction are likely.
- No birth defects are likely.
- Metsulfuron-methyl is not carcinogenic.
- It is neither mutagenic nor genotoxic
- It is a moderate eye irritant.

Metsulfuron-methyl is not classified as a poison in the Standard for the Uniform Scheduling of Drugs and Poisons.

For further information, please contact:

AgVet Chemicals Program
 Product Integrity Branch
 Ph: 6777 2133 or 1300 368 550
 Fax: 6343 2833

or write to:

The Registrar of Chemical Products
 Department of Primary Industries, Parks,
 Water & Environment
 GPO Box 44
 HOBART TAS 7001