

**orion** AGRISCIENCE

**WARNING**

KEEP OUT OF REACH OF CHILDREN



**Viper<sup>®</sup>**  
**90DF**  
**HERBICIDE**



A selective herbicide for the control of weeds  
in RADIATA PINE, established LUCERNE and  
NON-CROPLAND areas

**Active Ingredient:**

900 g/Kg of hexazinone in the form of a water dispersible granule



**10kg**

READ THE LABEL BEFORE USE

**HAZARD CLASSIFICATIONS:**  
**Acute oral toxicity Category 4, Acute inhalation toxicity Category 4, Eye irritation Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1**

**WARNING**  
Harmful if swallowed. Harmful if inhaled. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. Hazardous to soil organisms, Hazardous to terrestrial vertebrates. Very toxic to aquatic life with long lasting effects.

**PRECAUTIONS:**  
This product must only be handled, mixed and applied by a suitably qualified person as defined under the HPC notice 2017 Part 4C. Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3 kg or more are applied within 24 hours and likely to leave the application area.

**PERSONAL PROTECTION:**  
Avoid contact with eyes and skin. Do not breathe in the dust or spray mist. When handling, mixing or applying, wear overalls, boots, gloves, and eye protection. Clean protective equipment daily after work. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work.

**STORAGE:**  
Keep out of reach of children. Store in original container, tightly closed, in a locked, dry, cool, well-ventilated place away from food and animal feeds. Storage of certain quantities of this product trigger specific storage requirements. Store in accordance with NZS 8409 Management of Agrichemicals.  
When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

**DISPOSAL:**  
Dispose of this product only by using in accordance with this label. Triple rinse container and add rinsate to the spray tank. Dispose of container to a suitable landfill or agricultural recycling scheme. Do not burn. Do not use packaging for any other purpose.

**ENVIRONMENTAL**  
Take all reasonable steps to ensure that this product does not cause any significant adverse effects to the environment beyond the application area. Do not apply directly into or onto water. Ensure any granules are not accessible to birds. Collect spillage. For aerial application, use low drift nozzles to minimise the production of small droplets (100 microns). Preferably spray in a constant light breeze that is away from sensitive crops.

**FIRST AID**  
If medical advice is needed, have product container or label at hand.  
If swallowed, do not induce vomiting, rinse mouth. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Move person to fresh air and keep at rest in a position comfortable for breathing. Get medical help.  
Get medical help if you feel unwell. For advice, call the Poisons Centre on **0800 POISON (0800 764 766)** or a Doctor.

**EMERGENCY RESPONSE**  
In an emergency call **111, Police or Fire Brigade**. For specialist advice in an emergency only, call **0800 CHEMCALL (0800 243 6225)** (24 hrs).

**SPILLAGE**  
Exclude non-essential people from the area. Wear appropriate protective clothing and prevent material from entering waterways. Absorb spills with inert material and place in waste container. Wash area with water and absorb with further inert material. Dispose of safely to a suitable landfill.

**SAFETY DATA SHEET**  
Additional information is provided in the safety data sheet. Freephone **0800 ORIONAS (0800 674 6627)** or visit [www.orionagriscience.co.nz](http://www.orionagriscience.co.nz)

**GENERAL INFORMATION**  
Viper 90DF is a selective herbicide for the control of weeds in radiata pine and established lucerne. Viper 90DF can also be used for non-selective weed control against annual and perennial weeds and brush in non-cropland areas. Viper 90DF is absorbed through leaves and roots ensuring a high degree of weed control. Viper 90DF is most effective on actively growing weeds in warmer weather. Viper 90DF is compatible with commonly used forestry herbicides such as Assett.

**RECOMMENDED USES**  
Viper 90DF is effective against a range of broadleaf weeds and grasses.

**In forestry, weeds controlled include:** blackberry, bracken, seedling broom, seedling gorse, Himalayan honeysuckle, kikuyu, manuka, sweet brier

**In Lucerne and non-cropland areas, weeds controlled include:** annual pua, browntop, Californian thistle, mouse ear chickweed, nodding thistle, paspalum, ragwort, shepherds purse, storksbill, subterranean clover, sweet vernal, white clover, woolly mullein, yarrow.

**DIRECTIONS FOR USE**  
Apply with well-maintained and calibrated spray equipment. Application must be by a qualified loader, contractor or person.  
**It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food. Notice: Maximum Residue Levels for Agricultural Compounds.**  
**Beware:** Because residues may result from the use of Viper 90DF, care should be taken when replanting areas previously treated with Viper 90DF. Advice can be obtained from a representative of Orion AgriScience or from your supplier.

Rates of Application		
Radiata Pine – When used ALONE		
Application	Rate	Critical Comments
Site Preparation	2.1 – 8.3 kg/ha	For broadcast application, apply in 220 – 450 litres water/ha. For spot application, mix 25 g per 1 litre, and apply amount as per instruction in Rate column.
Release Spray (Broadleaf weeds and grasses)	2.1 – 4.2 kg/ha Spot: 10 – 15 mL/sq.M	Use the higher Viper rates on heavy soils, around heavy rainfall, or on hard to kill weeds such as bracken, blackberry, seedling gorse, seedling broom, paspalum, kikuyu, Himalayan honeysuckle, or when weeds are making active growth.
Release Spray (Scrub)	5.8 – 8.3 kg/ha Spot: 20 – 30 mL/sq.M	Do NOT apply if stressed, e.g. from drought, disease, recent transplant. Do NOT use on light soils, sands, soils low in organic matter, or water logged soils. Do NOT add surfactant if applied over the top of trees.

Radiata Pine – When used with ASSETT		
Application	Rate	Critical Comments
Release Spray	1.7 – 2.5 kg/ha with 12 – 15 L of Assett  Spot: 15 – 25 mL/sq.M	For broadcast application, apply in 220 – 450 litres water/ha. For spot application, mix 10 g Viper and 80 mL of Assett to 920 mL of water, and apply amount as per instruction in Rate column. Use the higher Viper rates on dense vegetation, hard to kill weeds such as Californian thistle, paspalum, seedling gorse and seedling broom, or where residual activity is needed to control summer germinating grasses. Do NOT apply if stressed, e.g. from drought, disease, recent transplant. Do NOT use on light soils, sands, soils low in organic matter, or water logged soils. Do NOT add surfactant if applied over the top of trees.
Lucerne (established)		
Application	Rate	Critical Comments
Broadcast	1.0 – 1.5 kg/ha. Apply in 300 litres water/ha	Use only on stands that have been established for over 12 months. Apply when weeds are actively growing, i.e. October – January. Viper 90DF can be used after cutting or grazing. Some yellowing and growth reduction may occur. Do not apply if stressed, eg from drought. Do not apply to rank lucerne growth. Up to 10cm growth is acceptable with minimal leaf exposure.
Non-Cropland Areas		
Application	Rate	Critical Comments
Broadcast	4.2 – 8.3 kg/ha. Apply in 220 – 450 litres water/ha	Use the higher rates on heavy soils, around heavy rainfall, or on hard to kill weeds such as paspalum, yarrow, Californian thistle, kikuyu and scrub weeds.
Knapsack	40 – 80 g per 10 litres water per 100 sq.M	
Handgun	500 g per 100 litres water	

**Rainfall**  
Providing the spray has dried on the foliage, light rain after application of Viper 90DF will not affect the results. Otherwise, rain within 3 hours of treatment may reduce effectiveness.

**Application Methods**  
Viper 90DF is non-corrosive and almost non-abrasive. Viper 90DF can be applied with conventional spraying equipment. Do not use strainers finer than 300 micrometres.

**Mixing**  
Viper 90DF mixes readily with water. To ensure a uniform suspension, pour the correct amount into the partly filled tank and add the remainder of the water while agitating. Agitate thoroughly before and during spraying and before spraying after a stoppage.

**RESISTANCE MANAGEMENT**

GROUP	5	HERBICIDE
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Viper 90DF contains hexazinone, a group 5 herbicide belonging to the triazinone chemical family. Some naturally occurring weeds may become resistant when excessive use of the same herbicide occurs. To prevent or delay the development of resistance, use in tank mixes and/or rotate use with herbicides with a different mode of action. Consult <http://resistance.nzpps.org/index.php> for alternative modes of action and details of resistance management strategies (if any) for the crops listed on the label.

**WARRANTY**  
This formulation is warranted to contain the specified active ingredient within accepted analytical tolerance when packed. The user bears the risk for damage resulting from factors beyond the manufacturer's control. The manufacturer declines all liability for damage resulting from improper storage or use of the product.  
Registered pursuant to the ACVM Act 1997, No. P10241  
See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions.  
Approved pursuant to the HSNO Act 1996, No. HSR000599  
See [www.epa.govt.nz](http://www.epa.govt.nz) for approval controls.

VIPER® is a registered trademark of Orion AgriScience Ltd. ASSETT™ is a trademark of Orion AgriScience Ltd.

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**UN 3077  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (HEXAZINONE 90%)  
HAZARD CLASS 9  
PACKING GROUP III  
HAZCHEM CODE 22**

Batch No.  
Date of Manufacture

