



HERBICIDE

Squadron®

**Pre-emergence Herbicide for use against
certain broadleaved and grass weeds in
Carrots, Peas, Pumpkin, Buttercup Squash,
Potatoes, Dwarf Green Beans, Oilseed Rape,
Fodder Beet and certain Fodder, Seed
and Vegetable Brassicas**

Contains 360 g/L clomazone in the form
of a capsule suspension.

WARNING // COMBUSTIBLE LIQUID // ECOTOXIC

Keep out of the reach of children

Net Contents **5 L**

GROUP

13

HERBICIDE



agrisource.co.nz



GENERAL INFORMATION

Squadron is a pre-emergence residual herbicide which can be used in Carrots, Peas, Pumpkin, Butternut Squash, Potatoes, Dwarf Green Beans, Oilseed Rape, Fodder Beet and certain Fodder, Seed and Vegetable Brassicas.

Squadron is taken up through the roots and emerging shoots of weed species. It acts by inhibition of photosynthetic pigments leading to bleaching symptoms on susceptible weed species. Susceptible weeds may emerge but are lacking pigmentation and plant death occurs shortly afterwards.

Squadron controls a wide range of annual grass and broadleaf weeds. It has little effective contact action on weeds and must be applied pre-emergent on both the weeds and the crop. Crop plants that have emerged at the time of application may be damaged.

Squadron may be tank mixed with other herbicides registered for use on the recommended crops (e.g. Dimethenamid-P in butternut squash, dwarf beans and forage brassicas, Clopyralid/ Picloram in forage brassicas. Also Trifluralin in brassicas and Linuron in beans) to broaden the range of weeds controlled. Observe all label recommendations for both products.

COMPATIBILITY

Squadron is compatible with a wide range of herbicides. Before using large quantities, check compatibility of the mixture with a jar test. Observe all label precautions for both products.

SOIL TYPE

Do NOT use **Squadron** on very light soils (CEC < 10). Use the highest rate recommended on heavier soils (CEC > 20). On soils with very high CEC values > 30, e.g. peat and heavy clay soils, **Squadron** may be locked onto soil particles (clay and organic matter) reducing efficacy.

Direct-drilled crops should be adequately covered with soil before treatment. If drill slots are open, harrow or roll across them before spraying. Weeds emerging from open drill slots are unaffected by pre-emergence herbicides such as **Squadron** due to lack of direct contact with roots or growing shoots.

MOISTURE

Moisture is required to activate **Squadron**. On dry soils a minimum of 13 mm of rainfall or irrigation is required for optimum weed control. Under dry conditions on cultivated land, shallow incorporation may improve overall weed control.

TRANSITORY CROP WHITENING

Some whitening of treated crops may occur under certain conditions. It is typically seen on the 1st and 2nd true leaves but not on the cotyledons. Plants will generally grow through these symptoms with no carry over effect on vigor or yield, provided plant growth is not stalled by cold wet conditions. Do NOT USE in late autumn/ early winter when declining soil temperatures and poor growing conditions are likely to occur after emergence. Slow growing, stunted crops may exhibit severe whitening and may not recover from treatment.

WEEDS CONTROLLED

Susceptible Weeds*	Moderately susceptible weeds**	Resistant weeds
Chickweed, Henbit , Shepherds' purse, Sow thistle, Twin cress, Wireweed, Summer grass, Barnyard grass, Combard, Groundsel, Portulaca Speedwells, Cleavers	Fathen (if moisture is available) Fumitory, Mallows Black nightshade, Redroot Spurry (Yarrow), Willow weed Yarrow	Docks Oxalis Mayweeds Field Pansy Clovers
*Subject to rate, soil type and mixing partner	**Subject to rate, soil type and adequate moisture to activate Squadron	

CONDITIONS OF SUPPLY

All goods supplied by us are produced under rigid quality control procedures which assure the purchaser that at the time of sale they are physically suitable for use in the manner stated. However, to the extent permitted by law, buyers and/or users of the goods accept that neither the manufacturer, Agri Solutions Ltd as registrant, nor any other distributor have any liability or responsibility whatsoever for any loss, damage or injury whether in contract or tort, whether direct, indirect or consequential howsoever arising in connection with the supply of these goods.

DIRECTIONS FOR USE

SPRAY DRIFT

Take all reasonable steps to ensure that **Squadron** does not cause any significant adverse effects to the environment beyond the application area. Avoid spray or spray drift contacting desirable plants or falling within their root zones. Avoid spray overlapping during application. Spray drift or equipment contamination may cause serious damage to desirable plants.

MIXING

Fill spray tank to one third full and with agitation running, add chemicals to tank in the following order:

1. Wettable powders and dispersible granules.
2. Suspension concentrates or flowables.
3. Fill tank to half full with agitation running then ADD **Squadron**
4. Continue to fill spray tank and add emulsifiable concentrates when near full.
5. Complete filling of spray tank while maintaining agitation. Maintain agitation until spraying is complete.

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.

IMPORTANT - RESISTANCE MANAGEMENT

Apply no more than ONE application per season and only in accordance with label recommendations

Squadron contains the GROUP 13 HERBICIDE [Inhibitors of carotenoid biosynthesis (unknown target)] clomazone, and continuous use of herbicides in this group may lead to a buildup of weeds resistance to it. To prevent or delay resistance, alternate with a herbicide from another group if possible and adhere to label instructions.

Squadron is not recommended for use on Turnip species when Autumn sown and subject to cold slow growing conditions.

Use of **Squadron** on other Brassicas, not mentioned above, is not recommended as crop damage may occur. Do NOT APPLY TO MUSTARD. NOT YET TESTED ON SEED CROPS.

OFF TARGET WHITENING

Squadron can cause whitening of desirable plants either by spray drift or by volatilization following product dilution or application. The Capsule Suspension (CS) formulation reduces but may not fully prevent this from occurring. The effects may last for a few weeks and plants usually grow out of it with no long-term effects. However, all steps should be taken to minimize the likelihood of this whitening occurring.

Ensure that when the product is being mixed into the spray tank that it is done away from desirable plants.

1. Use the lowest rate necessary for adequate weed control.
2. Apply only with accurately calibrated equipment.
3. Apply in 150-400 L of water per hectare using coarse droplets.
4. Do not apply to very wet soils or under cold conditions when conditions are not conducive to crop emergence and when slow crop growth will occur.
5. Do not spray in winds over 12 kph or in still conditions.
6. Avoid spraying within 100 m of homes and desirable plants.
7. Do not empty or clean sprayers near homes or sensitive plants.
8. Do not apply through irrigation systems.
9. Take extra precautions if applying by air. Add a drift control agent.

CROP ROTATION

CROP FAILURE Should a crop failure occur take note of the following;

1. If 660 mL-1.0 L/ha was used, replant only with cucurbits, and legumes (peas, beans, etc.) within 4 months of application.
 2. If 250-330 mL/ha used, the labelled crops may be re-planted immediately.
- Do not re-apply **Squadron**. Plough the land after harvest prior to planting any other crops.

FOLLOW ON CROPS

When used on light soils, particularly under minimum tillage and dry conditions, **Squadron** may persist in the soil for several months. Deep ploughing is recommended before re-cropping under these circumstances if practical. If not, avoid planting annual grass spp., such as Cereals, Sweet Corn, Maize and Annual Ryegrass. The presence of residues will be evident through whitening on broadleaf weed species. If these symptoms are present, sow a crop recommended on this label or sow a small area of the intended crop to test for any negative crop effects before any major planting.

Do not re-apply **Squadron**. Plough the land after harvest prior to planting any other crops.

READ LABEL COMPLETELY BEFORE USE



DANGER

Combustible liquid

ECOTOXICITY

Toxic to aquatic organisms with long lasting effects. DO NOT apply into or onto water. Collect spillage. Very toxic to soil organisms. Hazardous to terrestrial vertebrates.

RECORD KEEPING

Where 3 kg or more of the substance is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance. Refer to Part 4 Clause 48 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for details of information that must be recorded.

QUALIFICATIONS REQUIRED FOR USE OF THIS CLASS 9 PRODUCT

Anyone who mixes, loads, or applies this product, either by air or ground based methods, is required to be suitably qualified. Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for a list of suitable qualifications.

HANDLING PRECAUTIONS – FOR WORKPLACE USE ONLY

Personal Protection: Avoid contact with eyes, skin or inhalation of spray mist. Ensure adequate ventilation when handling concentrate. Wear eye protection and gloves. Do not eat, drink or smoke while using. Wash hands and face before meals and after work. When mixing or applying, wear appropriate personal protection including overalls, impervious, elbow-length gloves and eye protection. Wash hands and exposed skin before meals and after work. Wash and dry personal protective equipment before re-use.

Equipment: Apply using accurately calibrated and maintained equipment in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409). Flush spray equipment thoroughly with water after use.

Storage: Keep out of reach of children. Store in original container tightly closed and in a locked dry, cool, well-ventilated area, away from food stuffs, seeds and fertilisers. Storage must be in accordance with the current version of the New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing more than 100 L of **Squadron** require signage, secondary containment and an emergency response plan.

Shelf Life: When stored appropriately this product should show no significant degradation for two years from the date of manufacture.

Spillage: Move 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 containers. Sweep up solids without creating dust. Wash area with water and absorb with further inert material. Dispose of waste safely (such as to a suitable landfill).

Product Disposal: Ensure disposal of unwanted product is by intended use or by another operator strictly in accordance with label directions.

Container Disposal: Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.

Safety Data Sheet: Additional information is provided in the SDS available from your supplier, or www.agrsource.co.nz

FIRST AID

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. **IF SWALLOWED:** Rinse Mouth. DO NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. For advice, contact the National Poisons Centre 0800 Poison (0800 764 766) or a doctor immediately. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Continue rinsing. **IF ON SKIN:** Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. If medical advice is needed, have product container or label at hand.

EMERGENCY RESPONSE

In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use high volume water jet to extinguish. In a transport emergency call 111, Police or Fire Brigade

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ACVM Registration No. P010350

See www.foodsafety.govt.nz for registration conditions

HSNO Approval No. HSR100797

See www.epa.govt.nz for approval conditions

REGISTRANT

Agri Solutions Ltd
45 Kitchener Road,
Pukekohe 2120

DISTRIBUTOR

AgriSource (2000) Limited
45 Kitchener Road, Pukekohe 2120
09 237 0422 · www.agrsource.co.nz

BATCH NO:

DATE OF
MANUFACTURE:

24 HOUR EMERGENCY RESPONSE 0800 CHEMICAL (0800 243 622)

RECOMMENDATIONS

Apply to a moist, firm seedbed free from clods, before both weeds and crop have emerged. Apply in sufficient water to obtain even coverage of the soil. A contact herbicide (e.g. glyphosate may be added to control emerged weeds).

FORAGE AND SEED BRASSICAS1 KALE, SWEDE, FORAGE & OIL SEED RAPE and SPRING AND SUMMER SOWN TURNIP AND TURNIP RELATED CROPS e.g. PASJA		
Situation	Rate/ha	Critical Comments
Direct Drilled	250–330 mL	To enhance crop establishment and reduce the need for post emergence herbicide treatments, add to the last glyphosate treatment applied before sowing. 350-500 mL of clopyralid/ picloram EC may be added to improve the spectrum of weeds controlled. Moisture after application is critical to activate Squadron . Soil type and the availability of moisture will affect the degree and spectrum of weed control. A post emergence herbicide treatment may be required.
Drilled – Cultivated Ground	250–330 mL	Ensure the seedbed is moist, firm and free from clods. Apply after drilling and before crop emergence in combination with suitable partner (e.g. 350-500 mL of clopyralid/ picloram EC). Rainfall or irrigation after treatment will improve weed control.
Pre-plant soil incorporated	400 mL	Apply in mixture with trifluralin and incorporate before drilling. Ensure even incorporation using a Dutch Harrow or disks set to a fine cut. Avoid sprayer overlaps.
Ridged Seed Bed	400 mL	Application of pre-emergence herbicides prior to Ridging is common practice, but results in very uneven distribution of the herbicides between and within the ridges. Poor and patchy weed control can result. If this application method is adopted, use of a Cambridge roller to compact the ridge tops is recommended to optimize soil moisture retention and reduce aerated soil conditions. Best practice: Apply pre- emergence after ridging: Apply in combination with a suitable partner (e.g. clopyralid/ picloram EC 350-500 mL/ha) as soon as possible following ridging of the crop and before crop and weed emergence. Use of a Cambridge roller to compact ridge tops is recommended prior to herbicide application. To improve the evenness of coverage, adjust spray boom to ensure that the nozzle overlap is focused at the top of the ridged soil.
Surface seeding Forage and Oilseed Rape	250–330 mL	To reduce post-emergence weed pressure Squadron may be applied pre-broadcast sowing of seed. Seed may be sown once spray has dried. The addition of glyphosate is recommended to control established growth. Moisture (13mm) is required to fully activate Squadron and to promote germination of seed.
Fodder Beet	150–200 mL	Apply pre-emergence of the crop and weeds. Follow up with a post-emergence program. May be tank mixed with ethofumesate or other pre-emergence herbicides. Use the low rate on light soils. Use the high rate on heavier soils. Refer to 'Soil Type' notes and precautions above.

VEGETABLE CROPS		
Crop	Rate/ha	Critical Comments
Carrots	250–330 mL	Apply pre-emergence in combination with a suitable carrot herbicide (e.g. Linuron).
Dwarf green beans	660 mL	Apply 660 mL per hectare prior to crop emergence. Use a suitable partner herbicide (e.g. Dimethenamid-P) at recommended label rates for a broader spectrum of weed control.
Peas	250–660 mL	Apply prior to crop emergence. Use a suitable partner herbicide e.g. cyanazine or terbuthylazine at recommended label rates for a broader spectrum of weed control. Use the light rate on light soils (silts, loams) and higher rates on heavy soils (clay loams) and soils high in organic matter (peats) and where moderately susceptible weed species are present.
Pumpkins, Buttercup Squash	400–660 mL	Use the light rate on light soils (silts, loams) and higher rates on heavy soils (clay loams) and soils high in organic matter (peats).
Potatoes	330 mL	Apply in combination with a suitable potato herbicide (e.g. Prometryn, Terbutryn, / Terbuthylazine, Linuron or Metribuzin) at its lowest registered rate, after ridging but before crop emergence.
Vegetable Brassicas*	250– 30 mL	Applied in combination with a suitable partner as soon as possible following sowing of the crop and before emergence of both the crop and target weeds, or use alone, immediately prior to transplanting. Avoid Sprayer overlap. Transient whitening may occur on early foliage but yield will not be affected.
Broccoli, Brussel Sprouts, Cabbage, Kohlrabi		
*Use of Squadron on Chinese cabbage and other vegetable brassicas not mentioned above is not recommended as crop damage is likely.		