

Tank Mixing Frequently Asked Questions

What is Total Vegetation Control (TVC)?

Total Vegetation Control applications provide complete control of all grasses and broadleaf weeds.



Frequently Asked Questions

Why control all of the vegetation?

Safety is the major reason for controlling all of the vegetation on industrial sites. TVC is important for ground fault protection on electrical facility sites, fire prevention, and allows for visibility. Control of all vegetation on oil/gas sites and rail lines is critical for fire prevention, worker safety, visibility and accessibility. TVC is also important on rail lines as it improves drainage; vegetation holds water around railway ties causing them to rot – this increases the chance of derailment accidents and increases the cost of maintenance.

Why use herbicides? Can't you just cut the vegetation?

Herbicides are an important tool in an effective Total Vegetation Control program. Mowing and trimming are important parts of any maintenance program, but mechanical means alone do not provide a long-term sustainable solution for managing vegetation on TVC sites. Incorporating the use of herbicides into a long-term, sustainable vegetation management plan can increase profitability.

How do herbicides work?

Herbicides interrupt or modify a biological process within the plant that leads to the plant being controlled. There are many different biological pathways within a plant and they can vary between species. These pathways do not exist in other organisms, including humans and animals. For this reason herbicides, when used according to the label, only affect the plants they are designed to control.

Who regulates the registration of herbicides in Canada?

Before a herbicide can be sold in Canada, it must be registered by the Pest Management Regulatory Agency (PMRA), a division of Health Canada. Health Canada is also responsible for regulating many of the common products you use every day such as toothpaste and deodorant, as well as prescription drugs and over-the-counter medications.

Pesticides are one of the most stringently regulated products in Canada. The PMRA employs over 350 scientists, including biologists, chemists, toxicologists, epidemiologists, plant pathologists, weed scientists and entomologists, for the sole purpose of evaluating

pesticides. Before a pesticide can be approved for use in Canada, the PMRA requires that it undergo a thorough scientific review and safety assessment to ensure it meets Health Canada's standards. Only those products that meet these strict health and environmental standards can be registered by the PMRA for use or sale in Canada. A herbicide product will not be registered in Canada unless a health and environmental assessment shows that no harm to human health and the environment will result from its use.

What is included in the PMRA's science-based risk assessment?

- An examination of all sources and routes (oral, dermal, inhalation) of potential exposure to a given pesticide, including exposure through diet, from drinking water and from contact with treated areas like lawns and gardens
- An estimation of the amount of pesticides that people, including children, may come in contact with, both during and after a pesticide application
- A human health risk assessment with a particular focus on vulnerable populations, including children; this considers the potential for a pesticide to cause adverse health effects such as cancer, birth defects and endocrine disruption, and allows registration only for those pesticides with exposures well below levels that cause adverse effects
- An assessment of the movement, persistence and transformation (fate) of a pesticide in the environment
- An environmental risk assessment that considers risks to plants, birds, mammals, beneficial insects, aquatic organisms as well as fate in the environment
- A value assessment that considers the contribution of the product to pest management, as well as its health, safety and environmental benefits, and social and economic impact¹

Registered products are re-evaluated regularly to ensure they continue to meet current high-level scientific safety standards. Health Canada also conducts regular investigations and inspections to ensure only registered products are used in Canada and that they are used according to label directions.

¹http://publications.gc.ca/collections/collection_2017/sc-hc/H110-2016-eng.pdf

Frequently Asked Questions

TOTAL VEGETATION CONTROL (TVC) TANK MIXES

The herbicide components of a TVC treatment usually consist of one or more broadleaf weed control products, and grass control products. These products can have pre-emergent activity or post-emergent activity. Pre-emergent herbicides generally prevent the establishment of vegetation from seed for the entire growing season, and remain near the soil surface. Post-emergent herbicides are effective at controlling actively growing vegetation that is present at the time of application.

Benefit of using season-long control products

Using products that provide season-long control of grasses and broadleaf weeds prevents the need for multiple applications and visits back to TVC sites. There can be both financial and safety benefits to using season-long control products; site owners pay for only one application per year, and from a safety perspective site owners only have outside workers on those sites once per year.

Broadleaf weed control options

Milestone™ herbicide delivers control of invasive broadleaf weed species with low use rates and tank-mix flexibility.

ClearView™ herbicide is the industry standard selective herbicide, delivering consistent, high-performing, extended broadleaf weed control with flexible rates.

Sightline™ herbicide delivers effective post-emergent control of broadleaf weeds, including ALS and glyphosate resistant kochia.

What tank mixes are supported by Corteva Agriscience™, Agriculture Division of DowDuPont, for applications with Milestone, ClearView and Sightline?

Many different tank mixes with Milestone, ClearView and Sightline for non-cropland and bareground (TVC) uses are supported by Corteva Agriscience™. Some of these are labelled tank mixes, and others are unlabelled tank mixes, but are supported by Corteva Agriscience under the Pest Management Regulatory Agency (PMRA) tank mix policy. If you are unsure if products should be tank mixed, contact your Corteva Agriscience representative.

What is the PMRA tank mix policy?

The PMRA has established a position related to unlabelled tank mix use of commercial pest control products used in crop production, disease or vegetation management. Based on the position and guidelines established by the PMRA, application of UNLABELLED tank mixes is permitted provided the commercial pest control products are registered and applied within their registered use pattern (i.e., application rate, application timing to crops, weed stages, rotational guidelines, number of applications per season, pre-harvest intervals, pest claims, etc.).

Conditions users of unlabelled tank mixes must follow

1. Each tank mix partner is registered for use in Canada on the crop of interest.
2. The most restrictive label and use precautions are followed in compliance with label directions.
3. Where required specifically by one of the tank mix partners, the tank mix includes an adjuvant at the recommended level. If an adjuvant is not required on the label of any tank mix partner, then no adjuvant may be added to the tank mix.
4. The application timings of tank mix partners are compatible as related to crop and pest staging in addition to recommended loading, mixing and most complete tank-cleanout directions.
5. Each tank mix partner is applied in accordance with its registered product label, considering Use Directions, Precautions, Buffer Zones and Resistance Management recommendations. In cases where information on the tank mix partner label differs, the most restrictive directions must be followed.
6. The tank mix combination is a management tool for increased pest control, assists integrated pest management practice, allows for rotation of herbicide groups, saves time and is of value to commercial farm operations.

Frequently Asked Questions

Labelled Tank Mixes

Milestone™

HERBICIDE

Arsenal (Imazapyr) Herbicide: Season-long control of most broadleaf weeds and grasses. Consider tank mixing with VP480™ herbicide when grasses have emerged.

EsplAnade SC (Indaziflam) Herbicide: Season-long control of most broadleaf weeds and grasses. Always tank mix with VP480™ herbicide for control of emerged grasses.

VP480 Herbicide: Control of broadleaf weeds and grasses (only those present at time of application).

2,4-D Amine Herbicide: Enhanced control of broadleaf weeds present at time of application. 2,4-D enhances control of many broadleaf weed species present at the time of application. When tank mixed with Milestone™, Milestone will provide season-long control.

ClearView™

HERBICIDE

Arsenal (Imazapyr) Herbicide: Season-long control of most hard to manage broadleaf weeds and grasses. Consider tank mixing with VP480 herbicide when grasses have emerged.

VP480 Herbicide: Control of broadleaf weeds and grasses (only those present at time of application).

2,4-D Amine Herbicide: Enhanced control of broadleaf weeds present at the time of application. 2,4-D enhances control of many broadleaf weed species present at the time of application. When tank mixed with ClearView™, ClearView will provide season-long control.

Sightline™

HERBICIDE

VP480 Herbicide: Control of broadleaf weeds and grasses (only those present at time of application).

2,4-D Amine Herbicide: Enhanced control of broadleaf weeds present at the time of application. 2,4-D enhances control of many broadleaf weed species present at the time of application. When tank mixed with Sightline™, Sightline will provide season-long control.

Supported Tank Mixes

Note: Follow the most restrictive label

Milestone™

HERBICIDE

Torpedo Herbicide: Provides extended, pre-emergent control of grasses and small-seeded broadleaf weeds. Should be tank-mixed with VP480 when grasses have emerged. Length of control will be dependent upon rate applied.

LongRun 25WG Herbicide: Provides extended, pre-emergent and some post-emergent control of grasses and broadleaf weeds. Should be tank-mixed with VP480 when grasses have emerged.

Diuron Herbicides: Season-long control of most broadleaf weeds and grasses.

ClearView™

HERBICIDE

EsplAnade SC (Indaziflam) Herbicide: Season-long control of most broadleaf weeds and grasses. Always tank mix with VP480 for control of emerged grasses.

Torpedo Herbicide: Provides extended, pre-emergent control of grasses and small-seeded broadleaf weeds. Should be tank-mixed with VP480 when grasses have emerged. Length of control will be dependent upon rate applied.

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For more information about Corteva Agriscience™, Agriculture Division of DowDuPont, products or tank mixes please contact your Corteva Agriscience Representative or visit corteva.ca.