

# Esplanade<sup>®</sup>

## *Herbicide*

For pre-emergent control of grass and broadleaf weeds in commercial, industrial and non-crop areas and for pre- and post-planting weed control in forestry plantations.

**Contains 500 g/L indaziflam in the form of a suspension concentrate**

GROUP 29 HERBICIDE

**READ LABEL AND BOOKLET COMPLETELY BEFORE USING**

Approved pursuant to the HSNO Act 1996, No. HSR101193

See [www.epa.govt.nz](http://www.epa.govt.nz) for approval conditions

Net contents: 500 mL, 1 L, 3 L, 5 L, 10L

**WARNING**  
**KEEP OUT OF REACH OF CHILDREN**



**HSNO Classifications**

Specific target organ toxicity (single exposure) category 2  
Specific target organ toxicity (repeated exposure) category 2  
Hazardous to the aquatic environment acute category 1  
Hazardous to the aquatic environment chronic category 1  
Hazardous to soil organisms

May cause damage to organs (nervous system) if swallowed. May cause damage to organs (nervous system) through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Very toxic to the soil environment.

***PRECAUTIONS***

Do not breathe mist/spray. Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical advice/attention if you feel unwell. If exposed or concerned: Call a POISON CENTRE/doctor.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

**DO NOT** apply directly into or onto water.

***PERSONAL PROTECTION***

When handling, wear full protective clothing such as impervious gloves, waterproof hat, coat and trousers (worn outside rubber boots).

***Storage***

Store in original container tightly closed in dry, cool, well-ventilated area, away from foodstuffs. Store locked up.

***Spills and Disposal***

When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section. Contain the spill by damming, recover spilt product by absorbing with sawdust or an inert absorbent material then transfer the recovered spilt material to a properly labelled drum. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

*Disposal:* Dispose of this product only by using according to the label or at an approved landfill. Avoid contamination of any water supply with product or empty container.

*Container Disposal:* Triple rinse container and add residue to mixture. Take to an Agrecovery collection site.

***FIRST AID***

If swallowed, do NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin contact occurs, remove contaminated clothing and flush skin with running water. If splashed in eyes, wash out immediately with water, if irritation persists get medical advice. If inhaled, move the victim to fresh air immediately.

## **CONDITIONS OF SUPPLY**

**READ THESE CONDITIONS OF SUPPLY BEFORE BUYING AND USING. IF THESE CONDITIONS ARE UNACCEPTABLE RETURN AT ONCE UNOPENED.**

To the extent permitted by law 2022 Environmental Science AU Pty Ltd does not accept any liability or responsibility whatsoever for any loss, damage or injury whether direct, indirect or consequential howsoever arising in connection with these goods, including without limitation their storage, application, handling or use. 2022 Environmental Science AU Pty Ltd does not make any warranties (express or implied) with respect to fitness for purpose, merchantable quality or any other matter. To the extent only that 2022 Environmental Science AU Pty Ltd is prevented by law from contracting out of the Consumer Guarantees Act then these conditions apply subject to that Act. The Act shall not apply where these goods are acquired for business purposes.

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## **EMERGENCY RESPONSE**

**For specialist advice in an emergency call +64 9801 0034 or 0800 425 459 toll free.**

The toll free phone number is possibly accessible, but not guaranteed from payphones within New Zealand and is not accessible from outside of New Zealand.



Date of Manufacture

Batch No

**BEWARE: Apply this product carefully. Spray drift may cause serious damage to other desirable plants.**

## ***DIRECTIONS FOR USE***

Esplanade is a selective, pre-emergent herbicide for control of certain grass and broadleaf weeds in industrial vegetation management and in forestry plantations. Esplanade controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB inhibitor). Esplanade requires rainfall (minimum 6 mm) within several weeks after application to activate the herbicide. Esplanade has minimal post-emergent activity and generally does not control weeds that have emerged. A registered post-emergent herbicide may be mixed with Esplanade to control existing weeds. Esplanade does not control tubers, rhizomes and woody vegetation.

**INDUSTRIAL VEGETATION MANAGEMENT (IVM):** Apply Esplanade prior to weed seed germination. Esplanade does not generally control weeds that have emerged. For maximum weed control, the herbicide needs to reach the soil surface and be activated by rainfall or adequate soil moisture. Factors including soil type, rainfall and the amount of vegetation at the time of treatment may affect weed control. Control may be reduced if the product is not activated by rainfall prior to weed germination.

**FORESTRY:** The level of weed control is dependent on many variables including soil texture, moisture, temperature, weed species present, the amount of weed seed present in the soil and the crop canopy. Weed control activity may be reduced if the application is made to soil covered in heavy crop or weed debris that prevents a uniform distribution of the product reaching the soil. Removing debris prior to application will facilitate contact with soil.

Esplanade may be tank mixed with the following herbicide active ingredients but not limited to: glyphosate, hexazinone, metsulfuron-methyl, simazine and sulfometuron-methyl. Apply mixtures so that the spray solution covers the soil surface in a uniform manner. If uniform coverage is not achieved pre-emergent activity will be inconsistent. See also the Compatibility section of this label.

**MIXING** Ensure the spray equipment is thoroughly cleaned before use. Ensure the suspension is thoroughly mixed. Shake before use. Add the required amount of Esplanade to a partly filled spray tank with the agitation system operating. Add the remaining water and any tank mixture partners. Maintain agitation until spraying is complete. DO NOT allow spray mixture to stand overnight. Flush equipment with clean water after use.

## ***RESISTANCE MANAGEMENT***

### **GROUP 29 HERBICIDE**

Indaziflam belongs to the alkylazine class of herbicides which work by inhibiting cell wall synthesis. Consequently, the herbicide will have limited effects on mature parts of a weed in which cellulose synthesis has ceased and cell wall formation is complete. Therefore, indaziflam works best as a pre-emergence herbicide.

Do not rely exclusively on Esplanade for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control.

## RECOMMENDATION

Situation	Rate	Remarks
<p><b>Non-crop-areas</b> around buildings, commercial and industrial areas for maintenance of bare ground including public service areas, rights of way, rail tracks, roadsides, guideposts, powerlines, substations, airports, public utilities and fence lines.</p>	<p>150 – 200 mL/ha in 100 – 400 L water/ha or 30 – 40 mL per 100L water</p>	<p>Do not apply Esplanade more than once per year.</p> <p>Apply prior to germination of the weeds. For control of emerged weeds, use this product in combination with a post-emergent herbicide. Ensure adequate coverage for optimum weed control.</p> <p>Use the higher rate of Esplanade under higher weed pressure or for longer residual control.</p> <p>Application to hard surfaces such as paved parking lots and walkways should be made by spot application only.</p>
<p>Grassed areas on roadsides, airports, utility rights of way, median and centre strips</p>		<p>Do not apply Esplanade more than once per year.</p> <p>Apply this product to promote the growth of warm-season grasses. See Tolerant Species table. Grass should be in robust and healthy condition at the time of treatment. Cool season grasses are not tolerant to Esplanade. Use Esplanade on these grasses only when removal of these grasses is desired.</p> <p>Apply prior to germination of the weeds. Ensure adequate coverage for optimum weed control.</p>
<p>Rehabilitation and restoration of desirable vegetation in non-crop areas.</p>		<p>Do not apply Esplanade more than once per year.</p> <p>Apply prior to germination of the weeds. For control of emerged weeds, use this product in combination with a post-emergent herbicide. Ensure adequate coverage for optimum weed control. See Tolerant Species table.</p>
<p><b>Forestry – Pre-plant application</b> Pine trees (<i>Pinus</i> spp.) Eucalypts (<i>Eucalyptus</i> spp.)</p>		<p>Apply this product once pre-planting. DO NOT apply to Eucalyptus plantations post-planting. Apply to bare ground prior to weed seed germination. If weeds are present, add a knockdown or other partner herbicide as a tank mix.</p>
<p><b>Forestry – Post-plant application</b> Pine trees (<i>Pinus</i> spp.)</p>		<p>Apply this product once from two weeks to two months post-planting. Apply to bare ground prior to weed seed germination. If weeds are present, add a knockdown or other partner herbicide as a tank mix.</p>

## **RESTRICTIONS**

DO NOT apply by aircraft.

DO NOT apply in windy conditions.

DO NOT apply through any type of irrigation equipment.

DO NOT irrigate to the point of runoff for at least 3 days after application.

DO NOT apply to waterlogged soil.

DO NOT apply if heavy rains or storms are forecast within 3 days.

DO NOT apply Esplanade to soils that have open channels or cracks in the soil.

DO NOT apply around food or feed crops.

The maximum application rate for Esplanade is 200 ml/ha (0.100 kg indaziflam /ha).

Esplanade must not be applied into or onto water.

Esplanade must be applied using ground-based methods only with a low boom (spray boom less than 50 cm above the ground) and coarse droplets.

Esplanade must not be applied within 4 metres of any waterbody when used at 200 mL/ha (0.1 kg indaziflam/ha) and must not be applied within 2 metres of any waterbody when used at 150 mL/ha (0.075 kg indaziflam/ha). Waterbody includes all natural and modified/artificial water courses such as reservoirs, irrigation canals, water-supply races, canals for the supply of water for electricity generation or farm drainage, ditches, streams, rivers, ponds and lakes. For clarity, it excludes fully covered pipes, tanks or other enclosed structures, puddles or groundwater.

## **WEEDS CONTROLLED**

<b>Common name</b>	<b>Scientific name</b>
Amaranthus – Red Root	<i>Amaranthus powellii</i>
Asthma weed	<i>Euphorbia hyssopifolia, Euphorbia hirta</i>
Barley Grass	<i>Hordeum murinum</i>
Barnyard Grass	<i>Echinochloa-crus-galli</i>
Billy goat weed	<i>Ageratum houstonianum</i>
Black nightshade	<i>Solanum nigrum</i>
Broad-leaved Dock	<i>Rumex obtusifolius</i>
Burr medic	<i>Medicago polymorpha</i>
Capeweed	<i>Arctotheca calendula</i>
Chickweed	<i>Stellaria media</i>
Cleavers	<i>Galium aparine</i>
Cobbler's pegs	<i>Bidens pilosa</i>
Crabgrass	<i>Digitaria ciliaris</i>
Crowsfoot grass	<i>Eleusine indica</i>
Dandelion	<i>Hypochaeris spp.</i>
Fathen	<i>Chenopodium album</i>
Field Madder	<i>Sheradia arvensis</i>
Field Pansy	<i>Viola arvensis</i>
Fleabane	<i>Conyza spp.</i>
Fumitory	<i>Fumaria muralis</i>
Groundsel	<i>Senecio vulgaris</i>

Hawksbeard	<i>Crepis capillaris</i>
Hedge Mustard	<i>Sisymbrium officinale</i>
Hen Bit	<i>Lamium amplexicaule</i>
Jersey Cudweed	<i>Helichrysum luteoalbum</i>
Knobby club rush	<i>Ficinia nodosa</i>
Lesser Canary Grass	<i>Phalaris minor</i>
Mallows	<i>Modiola caroliniana</i>
Mouse-eared Chickweed	<i>Cerastium glomeratum</i>
Nettle	<i>Urtica urens</i>
Oxtongue	<i>Picris echioides</i>
Pale pigeon grass	<i>Setaria pumila</i>
Panic veldt grass	<i>Ehrharta erecta</i>
Paterson's curse	<i>Echium plantagineum</i>
Plantain	<i>Plantago spp.</i>
Ryegrass – Annual	<i>Lolium multiflorum, Lolium rigidum</i>
Ryegrass – Perennial	<i>Lolium perenne</i>
Scotch thistle	<i>Onopordum acanthium</i>
Scrambling speedwells	<i>Veronica persica</i>
Shepherds Purse	<i>Capsella bursa-pastoris</i>
Silvergrass	<i>Vulpia bromoides</i>
Silvery hair grass	<i>Aira cupaniana</i>
Soft brome	<i>Bromus molis</i>
Sow thistle, Milk thistle	<i>Sonchus oleraceus</i>
Spear thistle	<i>Cirsium vulgare</i>
Speedwell	<i>Veronica persica</i>
Staggerweed	<i>Stachys arvensis</i>
Storksbill	<i>Erodium cicutarium</i>
Summer Grass	<i>Digitaria sanguinalis</i>
Sweet vernal grass	<i>Anthoxanthum odoratum</i>
Tall sedge	<i>Carex appressa</i>
Thickhead	<i>Crassocephalum crepidioides</i>
Toadrush	<i>Juncus bufonius</i>
White clovers	<i>Trifolium spp.</i>
Wild oats	<i>Avena sativa</i>
Wild Radish	<i>Raphanus raphanistrum</i>
Willow weed	<i>Persicaria maculosa</i>
Windmill grass	<i>Chloris truncata</i>
Winter Grass	<i>Poa annua</i>
Wireweed	<i>Polygonum aviculare</i>
Yorkshire fog, fog grass	<i>Holcus lanatus</i>

## **TOLERANT SPECIES**

Esplanade may be used for weed control in non-crop situations to promote the establishment of desirable vegetation. The following species are known to be tolerant to pre and/or post-planting applications of Esplanade.

### **TOLERANT SPECIES TABLE**

<b>Pre- and post-plant application</b>	
Buffalo grass	<i>Stenotaphrum secundatum</i>
Common couch, hybrid couches, Indian doab	<i>Cynodon dactylon</i>
Kikuyu	<i>Pennisetum clandestinum</i>
<b>Pre-plant application</b>	
Pine trees	<i>Pinus spp.</i>
Eucalypts	<i>Eucalyptus spp.</i>



## **COMPATIBILITY**

As formulations of other manufacturers' products are beyond the control of 2022 Environmental Science AU Pty Ltd and as water quality may vary, a compatibility test to assess physical compatibility should be conducted with any potential tank mix partner prior to mixing commercial quantities. Fill a clear container three-quarters full with water. Add the appropriate amount of Esplanade and the tank mix partner. Shake or gently stir after each addition to mix thoroughly. Let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels and heavy oily film or other signs of incompatibility. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with Esplanade. Read the label of the other product before mixing or using the tank mix. Follow all use restrictions on this label and for all tank mix partners and use the most restrictive use pattern for the labels of all products in a tank mixture.

If using this product in a tank mix with another herbicide, add the appropriate amounts of the tank mix partner(s) in the following order: a) products in water-soluble packaging, b) wettable powders (WP), c) water-dispersible granules (WG), d) fertilizers, e) Esplanade, f) other aqueous suspension products (SC), g) other SC formulations, h) emulsifiable concentrates (EC) and other organic-solvent-based formulations. Do not mix concentrates together but add each one separately to the spray tank. Do not store mix overnight. As changes in climatic conditions can alter the sensitivity of plants to mixtures of sprays, 2022 Environmental Science AU Pty Ltd cannot be responsible for the behaviour of such mixtures.

## **SPRAYER CLEAN-UP**

The sprayer must be thoroughly decontaminated before being used again to spray susceptible plants or turf. Ensure that the following operation is carried out in an area that is clear of waterways, desirable vegetation and tree roots, and preferably in an area where drainings can be contained.

1. Drain sprayer completely and wash out tank, boom and hoses with clean water.
  2. Drain again.
  3. Fill the tank with clean water and add 300 mL of chlorine bleach (containing 4% chlorine) per 100 L of water with agitation running.
  4. Flush some bleach solution through booms and hoses and allow remainder to agitate in tank for 10 minutes.
  5. Remove nozzles and filters and leave to soak in a bleach solution of 500 mL per 10 L of water while tank cleaning is in progress.
  6. Briefly run the pump at periodic intervals to refresh chlorine solution in spray lines.
  7. Drain tank and repeat the procedure of flushing with bleach solution.
- Flush the tank, boom and hoses with clean water.

## **SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet.