



DANGER
Read Label before use
Keep out of reach of children

FORCE[®] PENETRANT

An organo-silicon surfactant for improved penetration and adhesion of agricultural and horticultural herbicides and other pesticides.

GSFP154/F03



ACTIVE INGREDIENT: contains 750g/litre polyether modified polysiloxane

Grosafe[®]

FORCE® PENETRANT



HSNO HAZARD CLASSIFICATION: Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Skin irritation Category 2, Serious eye damage Category 1, Hazardous to the aquatic environment chronic Category 2

TOXICITY: Harmful if contact with skin or if inhaled. Causes serious eye damage and skin irritation.

ECOTOXICITY: Toxic to aquatic life with long-lasting effects. Do not apply directly into or onto water. Take all reasonable steps to ensure the substance does not cause any significant adverse effects to the environment beyond the application area.

PERSONAL PROTECTION: Avoid skin and eye contact and inhalation of vapours/mist/spray. Use outdoors or in well-ventilated area. When mixing or applying, wear overalls, impervious gloves, eye/face protection and respirator. Wash hands and exposed skin thoroughly after handling.

Wash contaminated clothing and personal protective equipment before re-use.

STORAGE: Store product in original container tightly closed and in a dry, cool, well ventilated area away from foodstuffs. When stored appropriately this product should show no significant degradation within 2 years from date of manufacture. Contact the proprietor for further information about the use of any product that is older than this.

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section.

Contain and absorb with suitable inert absorbent material and store in properly labelled, sealed drums for safe disposal. If spray mixture is spilled absorb and collect in drums as above. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

PRODUCT DISPOSAL: If possible dispose of by using according to the label, otherwise dispose of in an approved landfill or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

CONTAINER DISPOSAL: Triple rinse container and add residue to mixture. If circumstances, especially wind direction, permit the empty containers may be burned. Recycle empty containers through AgRecovery (0800 247 326). Otherwise bury in a suitable land fill.

SAFETY DATA SHEET: A safety data sheet is available from Grosafe Chemicals Ltd.

FIRST AID: If medical advice is needed, have product container or label at hand.

IF INGESTED: Rinse mouth. Get medical advice.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor.

IF ON SKIN: Wash with plenty of soap and water. Get medical advice if you feel unwell. If skin irritation occurs: Get medical advice.

Take off contaminated clothing and wash before reuse.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice if you feel unwell.

EMERGENCY RESPONSE 0800 CHEMCALL: (0800 243 622).

GENERAL INFORMATION:

Force® Penetrant increases the reliability of brush weed herbicides on weeds that are dormant, stressed due to hot, dry, frosty or dusty conditions or when previously grazed or mechanically slashed. Force® Penetrant can also be used as a general purpose wetting agent with non-selective herbicides, including glyphosate in non-crop situations where the addition of a wetting agent is recommended. The addition of Force® Penetrant can be used to reduce the rain-free period of brush weed herbicides. Force® Penetrant also increases the visibility of the spray mix on the plant.

The following recommendations aim to control the egg masses of *Cicada* and *Passionvine* hopper. Spraying of Kiyifruit canes targets the control of populations that are within an orchard and will not affect external populations that may fly in. Accordingly, it is recommended to spray surrounding bush areas at the same time as orchard spraying takes place. It is also recommended to discuss treatment options with neighbours, as neighbourhood wide treatment will have a greater effect on overall control.

The *Cicada* eggs killed by this treatment are associated with the population that would emerge from the soil 2 or 3 summers after treatment, so no immediate effect should be expected. Ground spraying with Zespri approved insecticides in summer will complement this treatment by controlling the emerging *Cicadas*.

The *Passionvine* hopper eggs controlled are the population that would emerge in summer following treatment, so control should reflect in lower populations of *Passionvine* hopper within treated orchards.

Orchard sprayer: Apply 1.2 litres in 600-800 litres/ha with Zespri approved insecticides. Application may commence once leaf fall in complete through to 10 days before bud breaking sprays are to be applied, however, the preferred timing is early in dormancy before pruning and before early egg hatch. Thorough coverage of Kiyifruit canes is required for *Cicada* egg control and of old fruiting stalks and associated posts and wooden support structures for *Passionvine* hopper egg nest control.

Handgun application: Apply 100ml/100L with Zespri approved insecticides to the point of run-off. Spray surrounding bush areas with suitable spray equipment to get good coverage. Mahoe, blackberry, wineberry and bracken fern are favoured host plants for *Passionvine* hopper.

Application: Force® Penetrant with Zespri approved insecticides may be applied day or night to dry plants. Force® Penetrant with Zespri approved insecticides are rainfast once dry.

Zespri approved insecticides are toxic to bees if they are contacted by spray or land on wet spray deposits. Do NOT apply when bees are working and mow any flowering plants under vines before application.

Force® Penetrant will impart super wetting qualities for several days after application. Do not apply any other treatments to plants within 7 days.

RECOMMENDATIONS FOR USE:

Aerial application: Add Force® Penetrant to the spray mix at a minimum rate of 1.5 litres per hectare. For brush weed applications use a minimum of 400 litres of spray mix per hectare.

Broadcast spraying: Add 100ml Force® Penetrant per 100 litres of spray mix.

Handgun, Knapsack, Mistblower: Add 100–200ml Force® Penetrant per 100 litres of spray mix.

Mixing: To minimize foaming, add the required amount of Force® Penetrant to the nearly full tank, after other products have been added. Agitate or circulate before spraying.

Compatibility: Force® Penetrant can be used with insecticides and fungicides – check pesticide product label for use rates. Force® Penetrant is compatible with most commonly used water based marker dyes.

Application method	Rate per 100 litres water	Comments
With glyphosate formulations (Firstrate® 450, Hortcare® Glyphosate 360, 680) & Machette®540		
Boom	100ml	Particularly beneficial for the control of ryegrass
Handgun, knapsack	100–200ml	Use higher rate under unfavourable conditions or with hard to kill weeds
Aerial: General weed control Bracken, Blackberry Broom Gorse	200ml 250ml 500ml 750ml	Use a minimum of 500ml per hectare Use a minimum of 2L per hectare Use a minimum of 2L per hectare

With metsulfuron (Reply® 200, Reply® 600)

Handgun, knapsack	100–200ml	Use higher rate under unfavourable conditions
Aerial, boom: Gorse Kanuka, Manuka	500ml 2.0 litres/ha	Use a minimum of 2L per hectare

With brushkillers (Reclaim® Brushkiller)

Handgun, knapsack	100–200ml	Use higher rate under unfavourable conditions
Aerial, boom: Gorse, Broom	2.0 litres/ha	

In Kiyifruit with Zespri approved insecticides

Orchard sprayer, Handgun	1.2L in 600-800 litres water/ha	Use in dormant period. Follow instructions on the insecticide label
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Approved pursuant to HSNO Act 1996, Approval Code: HSR 002503 See www.epa.govt.nz for approval conditions

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.

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Grosafe®
CHEMICALS LTD

Batch No:

Date of Manufacture:

GSFP154/B03

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