



Sprayrite App User Guide

Version: First Released 2020

The screenshot shows the Sprayrite app interface with the following fields and values:

Field	Value
EQUIPMENT TO BE USED	EQUIPMENT NAME
PEST TO BE TREATED	PEST NAME
PRODUCT TO BE USED	PRODUCT NAME
PRESSURE	psi / bar
NOZZLE TYPE USED (refer to label)	NOZZLE TYPE
SPRAY TANK CAPACITY (l) *	1000
DESIRED CHEMICAL APPLICATION RATE (l/ha) (refer to label) *	6
MINIMUM WATER APPLICATION RATE (l/ha) (refer to label) *	50
TOTAL SPRAY OUTPUT (l/min) (all jets combined) *	12
TOTAL SPRAY WIDTH (m) (all jets combined) *	2.5
TOTAL AREA TO BE TREATED *	100
ACTUAL GROUND SPEED (km/hr) $100m \times 3.6 / \text{time taken (seconds)}$ * km/hr *	45

* mandatory field

SUBMIT





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Sprayrite Input Screen

PORT MACQUARIE-HASTINGS
COUNCIL

Sprayrite Clear all

EQUIPMENT TO BE USED EQUIPMENT NAME

PEST TO BE TREATED PEST NAME

PRODUCT TO BE USED PRODUCT NAME

PRESSURE psi bar

NOZZLE TYPE USED (refer to label) NOZZLE TYPE

SPRAY TANK CAPACITY (l) * 1000

DESIRED CHEMICAL APPLICATION RATE (l/ha) (refer to label) * 6

MINIMUM WATER APPLICATION RATE (l/ha) (refer to label) * 50

TOTAL SPRAY OUTPUT (l/min) (all jets combined) * 12

TOTAL SPRAY WIDTH (m) (all jets combined) 2.5

TOTAL AREA TO BE TREATED * ha linear km 100

ACTUAL GROUND SPEED (km/hr) $100m \times 3.6 / \text{time taken (seconds)} \times km/hr$ * 45

* mandatory field

SUBMIT

The SprayRite App includes a range of mandatory and optional fields. The optional fields are to be used at your choice but provide useful information when reviewing exported results or for your own record keeping.

All mandatory fields must be completed in order for the SprayRite App to work and produce accurate results.

OPTIONAL FIELDS

- **Equipment to be used** = Free text field to detail the equipment you are calibrating/using.
- **Pest to be treated** = Free text field to detail the pest/weed you are wishing to treat.
- **Product to be used** = Free text field to detail the product you will be using.
- **Pressure** = Free text field to record the pressure the regulator will be set at when the measurements for the TOTAL SPRAY OUTPUT are collected. You can toggle between PSI or BAR depending upon preference.
- **Nozzle type used (refer to label)** = This information will generally be available on the spray equipment label. If unsure or the advice is not clear contact the manufacturer.

MANDATORY FIELDS

- **Spray Tank Capacity (l)** = Record the capacity of the tank on the equipment you will be calibrating/using, measured in litres.
- **Desired Chemical Application Rate (l/ha) (refer to label)** = This refers to the volume of product to be applied per hectare. This information MUST be obtained from the product label. If unsure or the advice is not clear contact the product manufacturer. *In instances where the



desired chemical is not a liquid (such as a water-soluble granular product) please convert the rate to g/ha. The SprayRite App will recognise the conversion and apply it to the formula.

- **Minimum Water Application Rate (l/ha) (refer to label)** = This is MINIMUM amount of water to be applied with the product per hectare. This information MUST be obtained from the product label. If unsure or the advice is not clear contact the product manufacturer.
- **Total Spray Output (l/min)** = This is the TOTAL volume in litres, delivered in 60 seconds (1 min) of ALL jets used in the total boom configuration. For example, 1.2 (l/min) per jet x 4 jets= 4.8 (l). ALL jets will need to be measured individually to collect an accurate volume and to ensure ALL jets are functioning correctly.
- **Total Spray Width (m) (all jets combined)** = This is the width in metres of all jets combined from the farthest two ends of the spray pattern (left to right). The width can be expressed in multiple decimal places.
- **Total area to be treated** = The SprayRite App will calculate spray rates for both area and linear kilometres. Where calculating for broad area applications such as paddocks or sports fields select the ha Button. When conducting linear treatments such as road shoulder spraying select the linear kilometre Button.
- **Actual Ground Speed (km/hr) $100 \times 3.6 / \text{time taken (seconds)} = \text{km/hr}$** = This is the speed at which the machinery will be travelling when applying the mixed product. This is the single most significant variable you can adjust to change the spray rate efficiency. If the machinery does not have a speedometer you can use the formula $100 \times 3.6 / \text{time taken (seconds)} = \text{km/hr}$ OR a variety of apps can be downloaded which will determine ground speed. Ensure that ground speed is expressed in km/hr, is a safe speed for the terrain and maintains the spray pattern.

Sprayrite Results Screen

The screenshot shows the 'RESULTS' section of the Sprayrite app. At the top, there are logos for 'PORT MACQUARIE HASTINGS COUNCIL' and 'Sprayrite'. Navigation links 'Return to previous' and 'Export results' are visible. The results are presented in a table with a light blue background and a landscape illustration in the background.

Parameter	Value
WATER APPLICATION RATE GENERATED (l/ha)	64.00
TOTAL PRODUCT REQUIRED FOR JOB (l)	150.00
TOTAL MIX REQUIRED FOR JOB (l) (water & product)	1600.00
TOTAL SPRAYING TIME (hr:mins)	2 hr : 13 mins
PRODUCT REQUIRED PER TANK (l)	93.75
TOTAL TANKS REQUIRED FOR JOB	1.60
TIME REQUIRED TO APPLY EACH TANK (hr:mins)	1 hr : 23 mins
SPRAY APPLICATION RATE EFFICIENCY (%)	78
GROUND SPEED REQUIRED (km/hr)	45

- Water Application Rate Generated (l/ha)** = The water application rate has been calculated from the details you have provided. It reflects the amount of water required to be applied with your product per hectare. This rate must be higher than the MINIMUM WATER APPLICATION RATE. If it is too low, you can change this by increasing or decreasing ground speed or reducing spray output.
- Total Product Required For The Job (l)** = This reflects the amount of product required to treat the area submitted in the TOTAL AREA TO BE TREATED field of the input screen.
- Total Mix Required For The Job (l) (water & product)** = Total volume of water and product required for the job. Please note this may be more or less than one whole tank.
- Total Spraying Time (hr: min)** = Total time it will take to apply the mix uninterrupted (does not include mixing time for additional tanks if required).
- Product Required Per Tank (l)** = Volume of product required to be added per tank. *In instances where the desired chemical is not a liquid (such as a water-soluble granular product) the volume needs to be recognised as grams.
- Total Tanks Required For The Job** = Total number of tanks required to complete the job.
- Time Required To Apply Each Tank (hr:min)** = Total time it will take to apply each tank uninterrupted.
- Spray Application Rate Efficiency (%)** = This figure has been calculated from the details you have provided. It is the result of dividing the MINIMUM WATER APPLICATION RATE by WATER APPLICATION RATE GENERATED, expressed as a percentage. The aim is to get the SPRAY APPLICATION RATE EFFICIENCY as close to but not more than 100%. This figure is manipulated by altering the ACTUAL GROUND SPEED- reduce ground speed if the percentage is higher than 100%, increase ground speed if the percentage is significantly lower than 100%.
- Ground Speed Required (km/h)** = The ground speed at which the spraying will be carried out and can be changed to improve the SPRAY APPLICATION RATE EFFICIENCY

Sprayrite Exported Results Screen

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SPRAYRITE CALCULATOR RESULT
EQUIPMENT TO BE USED: Quad bike
PEST TO BE TREATED: Fireweed
PRODUCT TO BE USED: Hot Shot
PRESSURE (psi): 20
NOZZLE TYPE USED: Red
WATER APPLICATION RATE GENERATED (l/ha): 80.00
TOTAL HERBICIDE REQUIRED FOR JOB (l): 6.00
TOTAL MIX REQUIRED FOR JOB (l) (water & herbicide): 320.00
TOTAL SPRAYING TIME (hr:mins): 1 hr : 20 mins
HERBICIDE REQUIRED PER TANK (l): 3.75
TOTAL TANKS REQUIRED FOR JOB: 1.60
TIME REQUIRED TO APPLY EACH TANK (hr:mins): 0 hr : 50 mins
SPRAY APPLICATION RATE EFFICIENCY (%): 100
GROUND SPEED REQUIRED (km/hr): 10
```

EXPORTED RESULTS

When you select Export Results from the Results page the device will ask you to nominate a pathway to provide a location on your device for the file to be stored. It is simply a review of both pages you have completed in a simple text file. If opened in Microsoft WORD* or similar software, you will be able to add additional text to describe your spraying location or the other information to transform the document into a complete spray record.

*THIS EXPORTED TEXT IS NOT A COMPLETE SPRAY RECORD