

Hand Held Sprayer Calibration Sheet

ACTION	DETAIL	EXAMPLE	WORK SPACE
1. Read the product label	Application rate Chemical dose rate Spray quality needed from spray nozzle	75 to 100 l/hectare 5 l/hectare Medium	
2. Select nozzle & type of equipment	As above. Consider using a pressure sprayer for small areas or spot treatment.	372022 Blue Polijet	
3. Set pressure (if applicable)	If there is a pressure regulator, limiter or pressure control valve, select the pressure required to deliver the application rate and spray quality required – refer to nozzle manufacturers chart	Low 1bar setting on CP Classic sprayer	
4. Measure spray width	Hold trigger & lance at comfortable height above target, spray onto dry concrete and measure the band applied in metres.	1.5 m	
5. Walk & spray 100m strip and record time	Replicate the real condition as much as possible by wearing PPE and carrying a full sprayer. Repeat and take the average of the two measurements.	68 secs.	
6. Spray into a measuring cylinder for the 100m time	Using a steady pumping action, spray into the vessel for the time it took to walk & spray 100m. Repeat and record the average of the two measurements.	1.3 litres	
7. Calculate walking speed KPH	360 divided by time in secs for 100m = KPH (360 is a constant used in all such metric calculations)	$360/68 = 5.3$ kph	
8. Calculate the spray volume l/hectare	Volume collected in cylinder in litres x 100 ÷ spray width = L/hectare (100 is a constant used in all such metric calculations)	$1.3 \times 100 \div 1.5 = 86.66$ l/hectare	
9. Make adjustments to reach desired application rate l/hectare	If necessary alter the spray pressure, walking speed or spray width to obtain the correct application rate. If this is not practical change nozzle. Many spray product labels give an acceptable range of application i.e. 75 to 100 l/hectare	86.66 l/hectare OK if range of 75-100 l/hectare recommended	
10. Calculate the area to spray	Measure the length and width in meters (L x W = Area to be sprayed)	Length 10m x Width 6m = 60m ₂	
11. Calculate total water required for area to be sprayed	Volume collected in cylinder in litres x area to be sprayed ÷ 100 ÷ spray width (m) = Water required for the area to be sprayed in litres (100 is a constant used in all such metric calculations)	$1.3 \times 60 \div 100 \div 1.5 = 0.52$ liters	
12. Calculate chemical required for area to be sprayed	Water required for area to be sprayed in litres x chemical rate in l/hectare from label ÷ calculated spray volume from 8 above x 1000 = chemical required for the area to be sprayed in millilitres (ml) (1000 is a constant used in all such metric calculations)	$0.52 \times 5 \div 86.66 \times 1000 = 30$ ml	
13. Calculate chemical required for full or part tank	Capacity of spray tank (or part fill) x chemical rate in l/hectare from label ÷ calculated spray volume from 8 above x 1000 = chemical required in ml (1000 is a constant used in all such metric calculations)	$15 \times 5 \div 86.66 \times 1000 = 865$ ml	
14. Record data	Keep a spray record detailing all of the above	As above.	