# NOTES

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## DESCRIPTION

The TURBAIR ELECTRAFAN 12 is a light air-assisted hand-held spinning disc Controlled Droplet Application (CDA) sprayer. It is powered by a 12 volt DC battery, with Micron's rechargeable battery giving about 1½ hours spraying before recharging is required. The sprayer is designed for intermittent use. The sprayer with a full spray bottle weighs 3.25 kg, and the Micron battery weighs 6.6 kg. An electric motor spins the atomiser disc to produce uniformly small droplets which are carried to the target by the airstream generated by the fan. Liquid is fed by gravity. The TURBAIR ELECTRAFAN 12 is designed primarily for the foliar application of insecticides and fungicides in glasshouses and polytunnels of both water-based mixtures (e.g. ECs, WPs) at 20 to 40 litres/hectare total spray volume and Ultra-Low Volume (ULV) formulations. It is also used to apply public health insecticides, for applying vaccines to poultry and for insect control on livestock and in animal housing. When using the TURBAIR ELECTRAFAN 12 in an enclosed/confined space a full face shield and respirator **must** be worn (see 'OPERATOR PROTECTION').





Micron offer an optional 12 volt DC rechargeable battery and special safety recharger. It is a sealed lead acid 17Ah (amp hour) battery fitted into a nylon case with a shoulder strap. An in-line 10 amp anti-surge fuse is fitted (see 'THE BATTERY').

#### SAFETY

Using agrochemicals is a hazardous process, particularly in enclosed areas. Operators should comply with all relevant legislation and/or regulations governing the use of agrochemicals and <u>must</u> use appropriate personal protective equipment (see 'OPERATOR PROTECTION'). <u>Never</u> use the TURBAIR ELECTRAFAN 12 in potentially explosive atmospheres or spray flammable liquid through it.

The TURBAIR ELECTRAFAN 12 can be used with most conventional insecticides and fungicides, as well as specific ULV formulations (only available in some countries) which reduce risks in mixing and filling.

<u>Always</u> read the product label carefully to discover:-

- approved applications
- maximum dose rates
- maximum number of treatments
- operator protection required
- necessary environmental protection measures

N.B. 'Dose rate' refers to the amount of chemical product applied per hectare.

<u>Never</u> eat, drink, or smoke when working with agrochemicals. After using agrochemicals or handling equipment wash your hands thoroughly. Keep people (especially children) and animals out of areas being sprayed.

<u>Always</u> store agrochemicals safely to protect people and animals, and to safeguard the environment (take special care to avoid water pollution). See spraying sections for guidelines on safe use of the TURBAIR ELECTRAFAN 12 in operation.



# NOTES

# NOTES

#### **OPERATOR PROTECTION**

<u>Always</u> wear the protective clothing items listed on the product label for mixing and filling. The <u>minimum</u> protective clothing required for <u>spraying</u> with the TURBAIR ELECTRAFAN 12 is:

- ♦ face shield
- respirator
- rubber gloves and boots
- long sleeved shirt



long trousers

Note:

<u>A</u>coustic information: the sound pressure level at the operator's ear is 84 dB
 (A). Using the machine in an enclosed/confined space may cause this level to increase by up to 6 dB(A). The sound power level of the machine is 87 dB
 (A).

The wearing of suitable ear defenders is recommended when using this machine.

b) Vibration: the weighted RMS acceleration value at the hands when using this machine is 6.3 m/sec<sup>2</sup>.

<u>Always</u> disconnect the sprayer from the battery before servicing or following 'TROUBLESHOOTING' procedures.

Never touch the edge of the atomiser disc.

 $\underline{\mathbf{Never}}$  insert anything through the fan guard with the machine connected to the battery.

 $\underline{\mathbf{Never}}$  wear loose clothing, e.g. scarves and ties, or any item which could be drawn into the fan.

<u>Check</u> the sprayer cable frequently for cuts, abrasions and damage. A faulty cable must be replaced.

#### PREPARING FOR SPRAYING

Before connecting to the battery, check by hand that the atomiser assembly and fan rotate freely by turning the atomiser assembly in an anti-clockwise direction. (Do not touch the edge of the atomiser disc). If they are not free to rotate do not attempt to start the sprayer but contact your supplier or Turbair Service Department at Micron.

Plug the sprayer into the battery and switch on to check smooth running of the atomiser disc and fan.

The sprayer  $\underline{must only}$  be used at the rated voltage. The machine  $\underline{must}$  be switched off in the event of power interruption.

N.B. Before spraying for the first time with the TURBAIR ELECTRAFAN 12, sprayer operation must be checked using **only** water (see 'BEFORE SPRAYING').

![](_page_3_Picture_5.jpeg)

# DECLARATION OF CONFORMITY

Name of manufacturer or supplier:	Micron Sprayers Ltd.
Full postal address:	Bromyard Industrial Estate, BROMYARD, Herefordshire
Country of origin:	England
Post code:	HR7 4HS
Description of Product:	Battery powered, hand-held agricultural spraying machine.
Name and model number of machine:	Turbair ELECTRAFAN 12
Place of Issue:	Bromyard, England
Name of authorised representative:	G. S. Povey
Position of authorised Representative:	Joint Managing Director

# DECLARATION:

I declare that as the authorised Representative, the above information in relation to the supply/manufacture of this product is in conformity with the requirements of the Machinery Directive 89/392/EEC as amended by 91/368/EEC, 93/44/EEC, 93/68/EEC and 98/37/EC and complies with the relevant essential health and safety requirements.

Signature of authorised Representative:

Unscrew the feed nozzle using a 6 B.A. or 5 mm AF spanner and clean carefully with a soft wire, e.g. fuse wire. Clean the feed line with a pipe cleaner. Re-fit the feed nozzle. Before re-fitting the atomiser assembly, screw on a spray bottle filled with either kerosene when using ULV formulations or water and detergent when using water-based sprays and check for free liquid flow. Re-fit the bearing cover and the atomiser assembly, and tighten as previously described.

# TO SERVICE MOTOR AND SWITCH

(<u>Only</u> to be carried out by qualified Service Engineers)

Proceed as follows:

- 1. Remove handle caps and guard retainer screws.
- 2. Remove outer fan guard and circular guard ring.
- 3. Remove fan and inner guard.
- 4. Remove fan drive pin (tight push in), slinger and washer.
- 5. Remove switch cover (two retainer screws near fan shaft). Note position of large 'O' ring and ensure this is re-fitted to the motor housing before re-assembly.
- 6. Gently pull switch cover clear of the fan shaft and move to one side to expose motor brushes, switch and internal wiring.

N.B. Replacement brushes for the motor are available from Micron. If the armature or bearings need replacing, a new motor will be required.

When re-assembling:

- 1. Reverse the above procedure.
- 2. Make sure the fan drive pin is located in the grooves in the fan hub. This prevents the fan shaft from rotating when the fan nut is tightened.

## THE BATTERY

The Micron battery supplied is a Yuasa NP valve regulated lead acid sealed maintenance free 17Ah (amp hour) 12V D.C. non-spillable type. **Do not** check electrolyte specific gravity or add water, which will permanently damage the battery. Over discharging will also damage the battery thus recharge as soon as possible after use. When charging the battery using the recharger supplied, connect the recharger leads to the battery terminals (after unplugging the TURBAIR ELECTRAFAN 12 from the battery) and <u>then</u> switch on at the mains. If the TURBAIR ELECTRAFAN 12 is used with other 12V D.C. batteries or rechargers consult the manufacturer for recharging information.

The special safety recharger supplied by Micron will avoid accidental overcharging of the Micron battery.

## MIXING, FILLING AND CALIBRATION

Mixing and filling is generally the most hazardous process in the spraying operation. <u>Always</u> follow the label instructions. <u>Always</u> use a funnel when filling the bottle. <u>Only</u> mix enough spray for the area to be treated if using water-based mixtures to avoid the need for disposal of unused spray mix.

![](_page_4_Figure_19.jpeg)

![](_page_4_Figure_20.jpeg)

![](_page_4_Picture_21.jpeg)

<u>Always</u> wear gloves when handling agrochemicals and equipment.

<u>Always</u> use the correct equipment when mixing and measuring.

![](_page_4_Picture_24.jpeg)

<u>Always</u> wash off any skin contamination

![](_page_4_Picture_26.jpeg)

<u>Always</u> clean all equipment after use.

#### ULV FORMULATIONS

ULV formulations will have full instructions for use on the label.

#### WATER MISCIBLE PRODUCTS

Traditional water miscible insecticides and fungicides are usually applied with the TURBAIR ELECTRAFAN 12 at 40 litres total spray volume per hectare. Most insecticides can be used at 20 litres/hectare but fungicides may require around 40 litres/hectare. For example, if the label recommends applying a minimum of 2 litres of insecticide product made up to 100 litres of water per hectare with a conventional sprayer, use 2 litres of product made up to 20 litres for application with the TURBAIR ELECTRAFAN 12, i.e. a spray mix concentration of 10%.

**<u>Do not</u>** use product concentrations greater than the maximum recommended on the label (unless specific training or recommendations have been given) if the label:

- a) specifically prohibits use of 'Reduced Volumes' i.e. increased concentrations;
- b) has a <u>statutory</u> requirement for use of personal protective equipment when using the diluted product at high volumes (N.B. this will appear in the statutory box on the label); or
- c) carries one of the following hazard ratings: 'very toxic', 'toxic' or 'corrosive' or carries the warning 'risk of serious damage to the eyes'.

Micron do not generally recommend using spray mixes more than ten times the maximum concentration recommended for high volume application. At high concentrations some products can be phytotoxic to crops. Thus, if in doubt, first spray a small test area. **Do not** use more than the minimum recommended label dosage rate i.e. where the label recommendation gives a range of dose rates of, for example, 2 to 3 litres/hectare use no more than 2 litres/hectare. The safest product and lower dose rate appropriate for the treatment should be used at all times.

To prepare the spray mix with water miscible products select the dose rate of product to be applied per hectare (from the product label) and mix in a suitable container.

Examples of mixing spray - for 1 hectare (for 2,000m<sup>2</sup> i.e. 0.1ha, divide quantities by 10):

a) insecticide:	2 litres	b) fu
add water:	+ <u>18 litres</u>	ac
Total volume:	20 litres	T
i.e. 1 part insecticide :	i.e. 1	

b) fungicide:	4 litres
add water:	+36 litre
Total volume:	40 litres
i.e. 1 part fungicide	: 9 parts water

### STORAGE

Before storing the TURBAIR ELECTRAFAN 12 for long periods clean the fan guard with a small brush to remove any deposits and wipe the metal components with an oily rag to help combat corrosion.

Store the sprayer in a clean dry place away from direct sunlight. The battery should be recharged and stored in a cool dry place.

### TO CLEAN ATOMISER ASSEMBLY

#### <u>Always</u> disconnect the sprayer from the battery before servicing.

Hold the fan by inserting a pencil or similar between the guard rings near the nameplate. Remove the atomiser spindle nut by turning clockwise when facing the atomiser assembly (left hand thread). If the nut is tight loosen using pliers. Pull off the atomiser assembly, soak in paraffin, preferably overnight, then drain and dry.

Alternatively, dismantle the atomiser assembly by releasing the 3 clamp screws and nuts. Clean carefully. When re-assembling be certain to replace the two spacer washers on each screw before re-fitting the stainless steel rear collector disc.

Check that the bearing cover is in place, then place the atomiser assembly on the shaft, followed by the atomiser spindle nut (left hand thread). To tighten hold the fan as above, turn the nut anti-clockwise until finger tight, then rotate the atomiser assembly anti-clockwise. **Do not** overtighten.

![](_page_5_Picture_21.jpeg)

## TO CLEAN FEED NOZZLE

Remove the atomiser assembly as above. Remove the bearing cover from the shaft. To do this it may be necessary to tilt the bearing cover so that there is clearance between the outer diameter of the bearing cover and the feed nozzle.

#### TROUBLESHOOTING

FAULT CHECKING CHART					
Problem	Procedure				
Motor fails to start					
1. Switch	Check switch is in ON position.				
2. Battery run down	Test battery with a voltmeter or a suitably wired 12 volt bulb. Recharge if necessary ensuring battery fuse is not blown (see 'THE BATTERY').				
3. Loose battery connections	Check that all connections are clean and secure (battery terminals, plug connector) and that the battery is fully charged.				
4. Blown fuse	If the battery is fully charged, check the 10amp anti-surge fuse inside carrying case near the plug connector socket.				
5. Stiff or seized motor	Atomiser assembly should be free to turn in an anti-clockwis direction. Some friction from motor brushes is normal but if it difficult to turn by hand contact your supplier or Turbair Servic Department at Micron.				
<ol> <li>Faulty switch, internal wiring or motor</li> </ol>	Contact your supplier or Turbair Service Department at Micron.				
Motor runs slowly					
1. Battery run down	Test battery with a voltmeter or a suitably wired 12 volt bulb. Recharge if necessary (see 'THE BATTERY').				
2. Friction in atomiser assembly or motor	Atomiser assembly should be free to turn in an anti-clockwise direction. Some friction from motor brushes is normal but if it is difficult to turn by hand contact your supplier or Turbair Service Department at Micron.				
3. Poor electrical connections	Check systematically all external wiring and connections, especially in plugs and battery.				
4. Worn or defective switch contacts	Contact your supplier or Turbair Service Department at Micron.				
5. Defective motor armature	Contact your supplier or Turbair Service Department at Micron.				
Fails to spray, chemical dribbling from air bleed hole in feed line					
1. Blocked feed line	Remove the spray bottle. Remove and clean feed nozzle (see 'TO CLEAN FEED NOZZLE').				
Intermittent spraying					
1. Blocked air bleed in feed line	Remove the spray bottle and clean threads on the bottle and in the neck of the feed line. When fitting the bottle into the bottle holder tighten fully and then unscrew by 1/4 of a turn. If this is not done the airbleed may be blocked causing liquid feed to stop. Check the air bleed hole is clear.				
Intermittent spraying and excessive contamination of fan and fan guard with repeated blocking of feed nozzle					
1. Blocked atomiser assembly	Remove the spray bottle. Remove and clean atomiser assembly and feed nozzle (see 'TO CLEAN ATOMISER ASSEMBLY' and 'TO CLEAN FEED NOZZLE').				

#### CALIBRATION

The workrate when using the TURBAIR ELECTRAFAN 12 will be dependent on the particular situation. In glasshouses/polytunnels it will depend on the type of crop being treated and the row spacing. In crops such as vegetables and flowers it will generally take around 45 minutes to spray an area of 1,000m<sup>2</sup> (1/10 of a hectare). It will often be necessary to spray crops from both sides of the row to ensure adequate penetration and even coverage e.g. when foliage is dense, when the crop height exceeds 0.75m or when planting beds are over 2m wide. The objective is to apply an even spray cover to all target surfaces so it is very important for the operator to carefully direct the spray at all areas to be treated e.g. if spraying a crop the TURBAIR ELECTRAFAN 12 should be moved gently up and down along the height of the crop (with the machine held to the side and slightly behind the operator's direction of travel). Practice spraying - without any spray mix in the bottle - to see what sort of walking speed is practical.

The table below indictes the relationship between spray volume, flow rate and walking speed for the TURBAIR ELECTRAFAN 12 as per the following formulae:

a) Formula for calculating required flow rate:-

Flow rate $= 6$	x spray pass interval	x total spray volume x	walking speed
(ml/min)	( <b>m</b> )	( <b>l/ha</b> )	(m/s)

b) Formula to calculate the volume applied from a known flow rate:-

<u>Measured flow rate (ml/min)</u> x = 10 = spray volume (l/ha)Area sprayed in one minute (m<sup>2</sup>)

The following table is a guide to liquid flow rates through various feed nozzles:

Feed nozzle	Flow rate (ml/min)		
(orifice diameter marked in mm on nozzle)	Water	Oil (7mm <sup>2</sup> /sec viscosity)	
0.9	23	18	
1.1 (fitted)	55	40	
1.3	63	46	
1.4	85	50	
1.6	105	56	
2.0	N/A	77	

N.B. Liquid flow rates should always be measured with the actual spray mix. **Do not** use flow rates over 110 ml/min.

To check the flow rate wear the appropriate protective clothing. Choose and fit the feed nozzle that is likely to be required (see 'TO CLEAN FEED NOZZLE' for fitting instructions). Fill the bottle with the spray mix, attach to the sprayer (avoiding spillage) and then turn the sprayer over above a suitable container (**N.B.** <u>do not switch on</u> <u>the sprayer</u>). Wait until the liquid flow is steady and then allow the liquid to flow into a measuring container for one minute and measure the volume dispensed. If the flow rate is very different from that required change the feed nozzle and repeat the above procedure. If the flow rate is close to that required adjust walking speed.

![](_page_7_Figure_1.jpeg)

**Example:** Required spray volume = 30 l/ha; Spray pass interval = 2m Flow rate measured = 85 ml/min

Walking	speed	(m/s)	) =	
				_

Flow rate (ml/min) 6 x spray pass interval (m) x total spray volume (l/ha)

$$=$$
 85 = 0.24 m/sec

i.e. 0.24 m/s or 14.4 m in one minute (0.24 x 60)

Mark out a distance of 14.4 m and practice walking it in one minute using the sprayer as during the operation (see 'BEFORE SPRAYING').

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#### **TURBAIR ELECTRAFAN 12 PARTS LIST**

Item No.	Description	Part No.	Qty.	Item No.	Description	Part No.	Qty.
1	Label plate	T/4103	1	34	Bolt, 6.BA x 1/2" roundhead	T/5124	1
2	Motor housing with handles	T/A4104	1	35	Screw, D/E 2.BA x 1-5/8"	T/5128	3
3	Hand grip	T/4109	2	36	Screw, D/E 2.BA x 2-5/8"	T/5129	1
4	Circular fan guard	T/4111	2	37	Nut, 1/4" BF, nyloc	T/5132	1
5	Cap, plastic	7063	6	38	Nut, 4.BA, lock, brass	T/5151	3
6	Switch bracket	T/4129	1	39	Nut, 2.BA	T/5136	5
7	Label - spray direction	T/4145	1	40	Washer, 4.BA brass, large	T/5205	1
8	Outer guard ring assembly	T/B4159	1	41	Spacer No. 6 x 0.270" x 20 G, S/S	T/5211	6
9	Motor assembly 12 volt	T/A4501	1	42	Washer, 2.BA x 3/8" o.d.	T/5221	5
10	Fan end cover moulding	T/4506	1	43	Washer, 6mm	T/5225	2
11	Bottle holder and feed line assembly	T/A4507	1	44	Washer, DC spring 4.BA	T/5234	1
12	Extension tube and bearing	T/A4509	1	45	Washer, Lock ext 2.BA	T/5253	6
13	Atomiser support	T/4511	1	46	Nut, 6.BA	T/5272	1
14	Atomiser back plate with nozzle holder	T/A4512	1	47	Rollpin 3/32" x 1/2"	T/5304	1
15	Fan, 23 x 10	T/4513	1	48	Bead 9/16" plastic	T/5309	3
16	Atomiser bearing cover	T/4514	1	49	Crimp connector, 2.BA (blue)	T/6015	1
17	Atomiser disc - front plate	T/4515	1	50	Crimp connector, 1.BA (red)	T/6017	1
18	Atomiser collector plate	T/4516	1	51	Cable tie	T/6031	1
19	Atomiser retainer nut	T/4517	1	52	Cable, 2 core - 0.5M	T/6041-0.5M	1
20	Chemical feed tube (65mm)	T/4518-65mm	1	53	Cable, 2 core - 1.5M	T/6041-1.5M	1
21	Feed nozzle - 0.9mm	T/4519-0.9mm	1	54	Switch connector lead	T/A6042	1
	Feed nozzle - 1.1mm	T/4519-1.1mm	1	55	Switch	T/6043	1
	Feed nozzle - 1.3mm	T/4519-1.3mm	1	56	Off/on label	T/6061	1
	Feed nozzle - 1.4mm	T/4519-1.4mm	1	57	Switch cover	T/6062	1
	Feed nozzle - 1.6mm	T/4519-1.6mm	1	58	Battery pouch	T/6099	1
	Feed nozzle - 2.0mm	T/4519-2.0mm	1	59	Battery charger (UK plug)	T/6101	1
22	Atomiser drive shaft	T/4520	1	59	Battery charger (European plug)	6046	1
23	Machine identification label	T/4525	1	60	Battery, 12 volt DC rechargeable (17Ah)	T/6102	1
24	Motor brush	T/4804	2	61	In-line connector (male)	T/6103	1
25	Atomiser assembly	T/A4827	1	62	In-line connector (female)	T/6104	1
26	Atomiser extension assembly	T/A4828	1	63	Fuse, 12.5 Amp, 1/4 x 1 1/4" (T)	6759	1
27	Bottle with cap, 1 litre	T/4903	1	64	Cable gland	T/6110	1
28	Fuse holder, in-line, 20 Amp	6758	1	65	Electric connector block	T/6113	1
29	Screw, No. 6 x 1/4" S/T	4622	2	66	'O' ring (BS 043)	T/6118	1
30	Screw, No. 4 x 5/8" S/T	T/6123	2	67	Slinger	T/6119	1
31	Screw, No. 10 x 1-1/2" S/T	T/5007	3	68	Cable tie (medium)	6018	1
32	Screw, 4.BA x 1/4" brass roundhead	T/5114	3	69	Atomiser cover	T/2018	1
	Snap ring, internal bore 13mm	T/A4509	1	70	Connector, cable	T/6033	1
33	Screw, 2.BA x 1-1/2"	T/5115	1	71	Washer, M3 spring	T/6120	2

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![](_page_8_Figure_1.jpeg)

#### **BEFORE SPRAYING**

## ALWAYS:

- wear the recommended protective clothing (see 'OPERATION PROTECTION').
- plan a spray route before spraying so that the operator walks away from the treated area.
- work towards an exit point.
- hold the TURBAIR ELECTRAFAN 12 so that it is spraying to the side and slightly behind the operator's direction of travel.
- keep the spray head well away from the body to avoid the risk of direct contamination by the spray.
- check the condition of the battery before the spraying operation (if possible the day before so that there is time to recharge the battery if required).

![](_page_8_Picture_10.jpeg)

Before spraying for the first time use water **only** to check the operation of the sprayer. Put some clean water in the bottle and add a small amount of detergent and screw it into the bottle holder. When fitting the bottle into the bottle holder tighten fully and then unscrew by 1/4 of a turn. If this is not done the airbleed may be blocked causing liquid feed to stop. Check for leaks. Switch on the sprayer with the bottle below the atomiser disc and <u>then</u> turn the sprayer over so that the bottle is above the atomiser disc (spray liquid will then flow through the feed nozzle onto the atomiser disc). This is the spraying position, and spray will immediately be emitted. **Start walking** as soon as the sprayer has been turned over. Practice using the sprayer by walking along a few metres and then stopping spraying (see 'TO STOP SPRAY-ING').

The TURBAIR ELECTRAFAN 12 produces small droplets which are barely visible in normal conditions. To check the sprayer output switch on, turn the sprayer into the spraying position and direct the spray onto a suitable surface such as a pane of glass or painted surface for a few seconds. A liquid film or mass of small droplets will be seen.

#### TO START SPRAYING

Carrying the TURBAIR ELECTRAFAN 12 in the resting position, move to the planned starting point of the spray operation. <u>Then</u> connect the sprayer to the battery and, with the sprayer still in the resting position, switch on the sprayer to check the smooth running of both the atomiser disc and fan (<u>never</u> touch the atomiser disc when spinning). Then turn over the sprayer into the spraying position, pointing it at the target and start walking immediately.

<u>Always</u> hold the TURBAIR ELECTRAFAN 12 slightly to the rear so that the operator walks away from the spray. <u>Always</u> move the machine smoothly to ensure a steady airstream to carry the spray droplets to the target. When the bottle is empty mark the position where spraying stopped and restart spraying from this point. <u>Do</u> not walk through any part of the sprayed area.

Stop spraying if you hear the motor beginning to slow down. This usually means that the battery is running down (see 'THE BATTERY'). When the motor slows the droplets produced become larger which may reduce product efficacy and in crop situations may cause leaf spotting on sensitive plants.

#### TO STOP SPRAYING - AT THE END OF EACH SPRAY PASS

At the end of each spray pass turn the sprayer over into the resting position (with the bottle underneath the atomiser disc) to stop the liquid flow, <u>then</u> switch off the sprayer. Move to the start of the next spray pass and start spraying again.

![](_page_9_Figure_6.jpeg)

#### TO STOP SPRAYING - AT THE END OF THE SPRAY OPERATION

When spraying is finished spray out any remaining spray mix if using water-based mixtures N.B. ULV formulations can be stored for future use. Make sure that all the spray liquid is ejected from the atomiser disc when the bottle is empty by keeping the motor running for a few seconds. Then switch the sprayer off.

#### AFTER SPRAYING

1. Dispose of any surplus spray mix according to the product label. Store products safely, locked up and out of the reach of children.

![](_page_9_Picture_11.jpeg)

- 2. It is <u>essential</u> to clean the sprayer and bottle thoroughly after use. If using water-based mixtures a water and detergent mix should be put in the bottle, swilled around, and then sprayed out onto the treated area. If using ULV formulations use kerosene (<u>do not</u> use water and detergent) for cleaning out the sprayer. The sprayer should be wiped down externally using a cloth. Periodically clean the atomiser assembly (see 'TO CLEAN ATOMISER ASSEM-BLY').
- 3. After working with agrochemicals, or handling spraying equipment, <u>always</u> thoroughly wash hands and exposed skin. All protective clothing should be washed and stored separately from other clothing. Contaminated gloves should be washed inside and out.

![](_page_9_Picture_14.jpeg)

![](_page_9_Picture_15.jpeg)