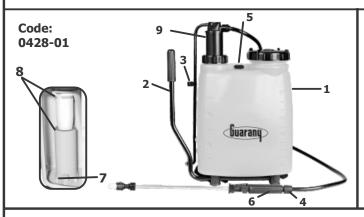


# Technical Bulletin 1165-04

## 10 KNAPSACK SPRAYER

**IMPORTANT:** Prior to operating this equipment, carefully read the instructions in this information sheet, together with the label and package leaflet on the chemical to be used.



- **1.** Tank with innovative design, providing greater comfort.
- 2. "L" shaped pump lever in robust material.
- 3. Vertical securing clip for dual spray boom.
- **4.** Manually tightened plastic connectors.
- 5. Straps with shoulder pads and adjustable buckles.
- 6. Discharge valve with safety lock.
- **7.** Relief valve on the cylinder to prevent excessive pressure. Complies with FAO specifications. Assists in reducing drift.
- 8. Double stirring system, mechanical and hydraulic.
- **9.** Pump which is highly resistant to chemicals

- 10ℓ Sprayer: lightweight, compact and economical.
- Pressure accumulator cylinder head designed to allow replacement of the suction tube and hose without the need for tools, by means of manually-operated plastic connectors.

#### Figure 1. Adjustable buckles

Greater comfort. Facilitates positioning of the equipment on the user's back.

Tiahten



Loosen



#### Figure 2. Efficient valve system



**2a. Pressure relief** valve: prevents the occurrence of excessive pressures, which can cause drift of the chemical product; ensures longer durability for the components.



**2b. Semi-spherical valve** (made of elastomer). Efficient product transference system.





#### Figure 4. UNIVERSAL Nozzle Connection

Allows fitting of any spray tip, which complies with ISO international standards.

Supplied with a GUARANY adjustable conical spray.

**Safety Lock:** push to one side to activate it or deactivate it.



#### Figure 5. Super 5 Valve

With unique safety lock that prevents accidental spraying and also a 'lock-on' system that ensures continuous and effortless spraying.

### **ACCESSORIES**

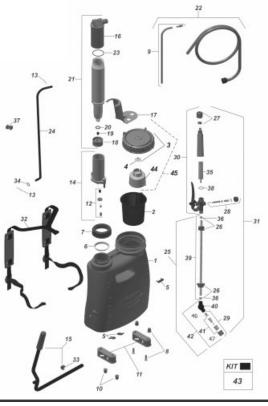
200mm UNIVERSAL articulated lance	9798
400mm UNIVERSAL articulated lance	9895
500mm UNIVERSAL articulated lance	9960
1 bar Flow regulator (yellow)	7464
1.5 bar Flow regulator (red)	7465
2 bar Flow regulator (blue)	7466
3 bar Flow regulator (green)	7467
Fan-shaped spray head shield	U7860
Universal liquid doser	U8018; U8096
1200mm Horizontal extension boom w/two nozzles	U8006
Discharge valve with telescopic lance	U6767
Spray discharge (2 nozzles)	U4222
Discharge lances	U8098; U8099

#### **TECHNICAL SPECIFICATIONS**

Tank capacity	10ℓ (2.7 galls)
Weight when empty	
Polyethylene pump/polypropylene	type of piston
Working pressure (maximum)	
Nozzle w/adjustable flow rate at 45 psi	600 ml/min (0,15 galls/min)
Packing box	. 405 x 170 x 480 mm (15,9 x 6,7 x 18,9 ins)

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#### **PARTS LIST**



ITEM	DESCRIPTION	CODE	PARTS/ PACKAGING
01	Orange chemical tank	. 7570	1
	Green chemical tank	. 12318	1
02	Tank lid with valve	. 7563	1
03	Chemical tank filter	. 8112	1
04	Valve strainer	. 5613	6
05	Harness Clips	. 6457	10
06	Plastic gasket	. 6126	4
07	Securing collar	. 6210	2
08	Frame securing bolt with nut	. 6129	2
09	Suction tube assembly	. 4767	1
10	Plastic Nut	. 5852	4
11	Right/Left Frame	. 6029	1
12	Set of cylinder valves	. 4647	1
13	Clip	. 3000	6
14	Complete plastic cylinder	. 6116	1
15	Complete "L" lever	. 4648	1
16	Cylinder head	. 6115	1
17	Agitator	. 6124	5
18	Double bushing	. 6120	10
19	Hemispherical valve	. 5066	10
20	O-ring	. 7565	10
21	Complete plastic accumulator assembly	. 4755	1
22	Complete Knapsack 10% hose set	.11080	1
23	O-ring	. 6215	6
24	Lever rod	. 5053	1
25	Complete discharging tube	.10757	1
26	Threaded coupling for lance	.10738	4
27	Threaded coupling for hose	. 4428	2

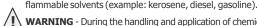
ITEM	DESCRIPTION	CODE	PARTS/ PACKAGING
28	S-5 valve repair kit	4605	1
29	Fully adjustable nozzle	8118	1
30	S-5 Discharge valve	4604	1
31	Complete discharge kit	4653	1
32	Lifting strap	4654	1
33	"L" lever locking pin	2812	10
34	Flat washer	1038	20
35	Filter	6270	10
36	Threaded coupling for discharge tube	6203	10
37	Clip	6349	6
38	O-ring	6316	6
39	Discharge tube with threaded coupling $\dots$	10756	1
40	Elbow joint	10602	1
41	Adjustable spray tip	9717	6
42	Complete elbow joint and fittings	10701	1
43	Repair Kit*	4460	1
44	Dosing Cup	10075	1
45	Complete tank lid set	10860	1
46	Spray tip filter	1143	10
47	Nut	3441	4
*1/			
	COMPONENTS hreaded collar	<b>CODE</b> 6120	
	pherical valve	5066	
	ded coupling for discharge tube	6203	
	SeatSeat.	6117	
	Valve	6711	
	valve	0/11	

#### **ASSEMBLY INSTRUCTIONS**

- 1. Attach lever rod (item 24) into the hole of the "L" lever arm (item 15) using the clip (item 33).
- Discharge assembly (item 31 Figure 3): fit filter tip (A) into the body of the elbow joint (B); screw on the adjustable tip assembly (C) with the body (B); fit the body of the tip (B) to one of the ends of the lance, tightening it with one of the threaded bushes (D); then attach the other end of the lance to the S-5 valve (E) and tighten up the other bush (D).

#### **SAFETY INSTRUCTIONS**

**CAUTION -** This equipment can only be used with agrochemicals or pesticides approved by the local public health regulatory authorities in the country where the knapsack sprayer is to be used. To enquire about the possibility of using the equipment for the application of other substances, the manufacturer should be consulted. Guarany does not recommend the use of chemical products containing



WARNING - During the handling and application of chemicals, personal protective equipment (PPE) must be worn. Read the label and package leaflet on the chemical in order to know which PPE should be used and for any other forms of protection necessary when handling these products. Avoid wastage of chemicals.

#### **OPERATING INSTRUCTIONS**

- Fill the tank with the prepared agrochemical by passing the liquid through the filler filter (item 2).
- Place equipment on the back, adjusting the straps using the adjustable buckles (Figure 1).
- Operate the lever arm rhythmically until the desired working pressure is reached; the equipment has a pressure relief valve (Figure 2A) that will be activated when the pressure in the accumulator exceeds 300 KPa (45 psi) and when the system is activated, normally you will hear a slight hissing noise when operating the lever, indicating that the arm need not be pumped anymore;
- To spray, direct the nozzle towards the target to be sprayed and press the trigger of the Super 5 discharge valve (Figure 5). A mist or more solid type spray is achieved by turning the adjustable tip on the conical jet (Figure 4).

#### **DIY SPRAY MAINTENANCE**

- Lack of pressure in the pump: replace bushes and valves (items 12, 18 and 19). Important: Manually tighten the threaded bush (item 18).
- Fluid escaping from top of tank filler lid: replace the valve (item 4) or retighten the gasket nut (item 7).
- Dripping from the adjustable nozzle: discharge any air from the Super 5 valve (item 30) spraying upwards for a few seconds, or replace, using valve repair kit (item 28).
- Stiff lever operation: periodically lubricate the bush (item 18) or slightly loosen the packing gasket (item 7). Important: lubrication of the bush should be made with normal grease and can be done while it is inside the tank, eliminating the need to disassemble the unit.
- Never leave pesticide residues in the spray tank as the chemical may become
- At the end of each application rinse off and dry your sprayer, followed by lubrication. Store in a cool dry place.

#### **ENVIRONMENTAL RECOMMENDATIONS**

#### 1. Disposal of Waste Liquids

Do not wash packaging containers or sprayers in ponds, fountains, rivers and other water sources. Properly dispose of packaging and any product remains. Follow the instructions given on the packaging of agrochemicals.

#### Apply only the recommended doses and maintain the application within the target area

Do not apply agrochemicals in areas located within a minimum distance of 500 meters from any protected water catchment areas used for public water supply; and within 250 meters of water sources, isolated settlements, animal herds and crops liable to be damaged.

#### Disposal of solid waste (general parts and equipment packaging)

Guarany recommends that waste disposal is carried out in compliance with the regulatory requirements of any current legislation. Waste disposal performed incorrectly can have an impact on the environment, causing significant changes to soil quality, to surface water, to groundwater, as well as on the health of the local population.

If you have questions regarding the disposal, consult our website: <a href="www.guaranyind.com.br">www.guaranyind.com.br</a>

#### Guarany Indústria e Comércio Ltda.

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