



tradition and technology

Technical Bulletin 1196-04

UNIVERSAL LIQUID DOSER

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.



Code: 8018.00.00



Code: 8096.00.00

WHEN PRECISION AND COSTS ARE TAKEN INTO ACCOUNT

The Universal Liquid Doser was developed for situations requiring high precision general chemical dosing, allowing precise dosage adjustments in the range of 2 to 25 ml per operation with ease.

Dosage control mechanism: unique and safe system (patented), operated through an accumulated pressure system, which allows for **highly reliable dosages**, with adjustment of the quantity applied through a toothed drive belt.

This accessory is extremely robust, in which materials resistant to both corrosion and chemicals are used.

It can be used with most liquid chemicals such as insecticides, fungicides, herbicides and hormonal treatments in general, which can be applied in a measured manner for agriculture and livestock, etc. It is ideal for the germination of seedlings in greenhouses, for tobacco, cocoa and coffee crops too. It can also be used by laboratories, schools and industries for accurate and safe manual dosage of liquids, without the need for the operator to have contact with the product

PRODUCT CODE

8018.00.00 (with applicator tube)
8096.00.00 (without applicator tube)

TECHNICAL SPECIFICATIONS

Minimum dose per operation (ml)	*2
Maximum dose per operation (ml)	*25
Minimum operating pressure (kPa/psi)	150/22
Maximum operating pressure (kPa/psi)	600/87
Body material, cylinder and filler cap	Polyacetal plastic
O-ring material	Fluoroelastomer
Net weight (kg/lbs)	0,25/0,55

*These values were obtained using clean water, and may vary depending on the product used or nature of application.



SAFETY INSTRUCTIONS

- Only allow the use of this product by people who understand and can follow the safety rules and instructions contained in this leaflet.
- When operating the sprayer with agrochemicals, always use personal protective equipment (PPE). Check the label and the chemical product sheet and the PPE indicated for each application.
- Never allow the application of agrochemicals by minors, pregnant women, sick people or those under the influence of medication, drugs or alcohol.
- Maintain children, pets and any unauthorized persons at least 20 meters away from the work area.
- Avoid wastage of agrochemicals.

OPERATING AND ASSEMBLY INSTRUCTIONS

Assembly of the Doser: attach the spray hose to the doser unit using a hose clamp (if you are using a Guarany Sprayer, screw the doser directly onto the handle grip). The doser must be connected to hoses with a diameter of 8 to 10 mm.

Determining the correct dosage: Put clean water in the sprayer, pump it up to a working pressure within the safe operating limits of this accessory. Operate doser lever (item 4) several times to eliminate any air contained inside (Important for dosing accuracy). Next, determine the dose to be applied, keeping the operating lever in the depressed position, turning the red toothed disc, using as a guide the scale in millilitres (ml) contained in item 15, then release the operating lever in order to fill the dosing cylinder and, always maintaining pressure in the system, apply the dosing flask (item 17), which accompanies this accessory. If necessary, change the setting and repeat, until the desired dose is reached.

Application: depress the operating lever, until the product is totally expelled (completion of dosage cycle), release the lever and wait (seconds) for the completion of the new recharge, always maintaining the internal pressure of the sprayer.

CLEANING INSTRUCTIONS

DAILY

1st With the doser still coupled to the sprayer, rinse it out by passing clean water through it under pressure until it is evident that the washing water does not contain any excess waste matter. **2nd Figure 1A:** Remove the residual water from the doser by unscrewing the top cover (item 15) of the doser body (item 8).

EVERY WEEK, AND WHENEVER STORING THE DOSER FOR A LONG PERIOD

1st Figure 1B: Remove the operating lever (item 4) in order to remove the spring (item 5) and then remove the doser needle that contains three O-rings (item 12). **2nd** Once this is done, unscrew the top cover (Figure 1A), detach items 14, 13, 12 and 8, giving you access for cleaning the O-rings that are attached to these items (Figure 2). **3rd** Wash in soapy water, all disassembled components, rubbing the O-rings lightly with soft a sponge; **4th** Then dry them, lubricate them with light vehicle oil, and only then reassemble and store your doser in a cool place, away from any dust..

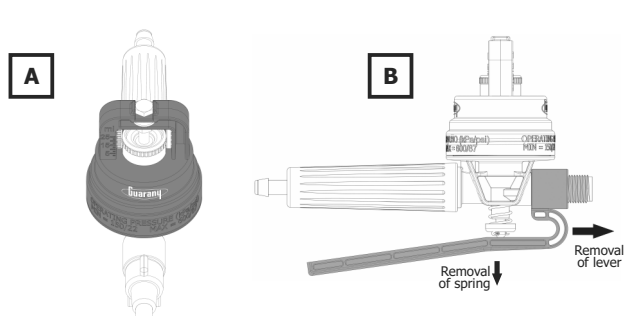


Figure 1

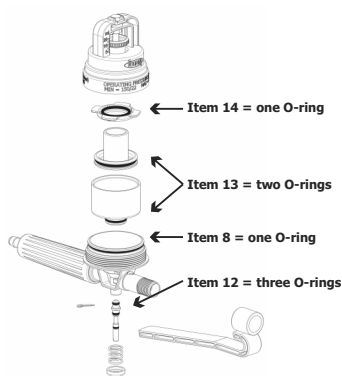


Figure 2

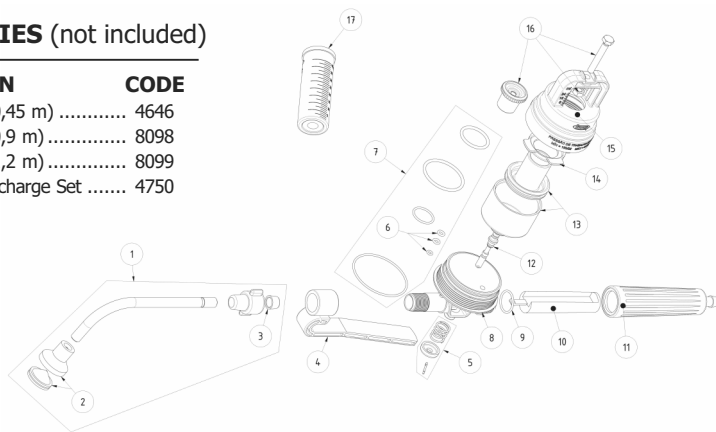
PREVENTIVE MAINTENANCE/REPAIRS

Use our service network or call us.

SPARE PARTS

ACCESSORIES (not included)

DESCRIPTION	CODE
Discharge tube (0,45 m)	4646
Discharge tube (0,9 m)	8098
Discharge tube (1,2 m)	8099
Rotary Nozzle Discharge Set	4750



ITEM	DESCRIPTION	CODE
01	Complete applicator tube assembly	8066
02	Applicator nozzle.....	8067
03	Discharge tube locking bush.....	6203
04	Valve lever	5197
05	Spring (kit)	8068
06	Needle O-ring.....	8069
07	Valve O-ring	8070
08	Doser casing (kit)	8071
09	Buna O-ring 18.77 x 1.78	6316
10	Valve filter	6270
11	Doser Handle Grip	2389
12	Doser Needle	7213
13	Doser Cylinder and Piston (kit)	8072
14	Doser Retainer O-ring.....	7225
15	Top Cover (kit)	8073
16	Complete Adjustment Button Assembly	8074
17	Doser Feeder Flask	7268

ENVIRONMENTAL RECOMMENDATIONS

1- Disposal of Liquid Waste

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

2 – Apply only the recommended doses and restrict applications to the target area

Do not carry out the application of agrochemicals in areas located within a minimum distance of 500 metres from groundwater captation areas of water destined for public supply; and within 250 meters of water springs, isolated homes, livestock herds and crops susceptible to damage.

3 – Disposal of solid waste (parts in general and equipment packaging)

Guarany recommends that waste disposal is carried out in compliance with the regulatory requirements under any current local 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 being prejudicial to health of the local population.

If you have questions regarding disposal procedures, consult our site.

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