

Welcome and congratulations

on purchasing your new quality product. Thank you for the trust you have shown in our brand. Your satisfaction with our product and services is very important to us. Please contact us if your expectations are not met. You will find our address on the title page of these instructions for use.



Make certain to read the instructions for use before using the device!
Keep the instructions for use in a safe place where they can be easily found.



The instructions for use are an integral part of the device and must be enclosed when the device is passed on. Particular safety measures are required when working with the device.

Usage

Pressure spraying devices 3237P., 3237F., 3278P. and 3278F. are designed for the spraying of cleaning agents and construction chemicals as deep ground, carpet solvents and other liquids from the building trade. The manufacturer of the spraying agents has to approve that they can be applied with sprayers.



Improper use may result in dangerous injuries and environmental damage.

Follow the safety notices and data sheets of the substance manufacturers before each application. Observe the specified maximum concentrations for chemical substances and preparations. We will be happy to advise you on what best suits your needs. Observe the legal and statutory regulations applicable in your country.

The device may be used outdoors or in well ventilated rooms only. Have the salesperson or an expert show you how to operate the device if you are working with it for the first time.

Not suitable for

- plant protection products
- combustible liquids
- corrosive substances (*certain disinfecting and impregnating agents, acids and bases*)
- liquids containing ammonia
- liquids at temperatures above 30 °C (78 °F)
- wetting agents (*surfactants*), solvents, and liquids containing solvents which can cause or promote cracking in the applied plastics.
- viscous or sticky liquids or liquids that form residues (*dyes, greases*)
- use in applications for foodstuffs

Under no circumstances should you use

- external sources of pressure without original compressed air filling valve
- for flaming
- for storing and holding liquids
- as an eyewash

Safety



Devices may not be used for spraying plant protection liquids.



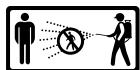
Only trained, healthy and rested people may work with the device. You should not be under the influence of alcohol, drugs or medication.

Children and adolescents must not use the device

Keep the spraying devices safe from access to children.

Take precautions to prevent hazardous substances from being misused.

→ **Accident risk!**



Keep bystanders away during spraying.

Never spray on people, animals, electrical devices and lines, into the wind, or into bodies of water.

→ **Risk of injury!**



Wear appropriate protective clothing, goggles and respiratory protection in line with the applicable national regulations when working with hazardous substances.



Avoid ignition sources in the environment.



Do not allow the device to remain under pressure and/or exposed directly to sunlight. Make certain the device is not heated beyond the maximum operating temperature. (→ *Table 1*).

Protect the device from frost and ammonia.



Never blow through the nozzles or valves with your mouth.

→ **Risk of poisoning!**



There is a risk of slipping or tripping on smooth or wet surfaces, snow, ice, on slopes and on uneven terrain.



Repairs and modifications to the device are not permitted.

Have damaged parts or parts that do not work properly repaired immediately by our customer service department or by service partners authorized by us.

The effect of the safety valve must not be bypassed or made inoperative.

→ **Explosion hazard!**



Use only original spare and accessory parts.

We cannot assume any liability resulting from the use of third-party parts.



When pumping, always observe the pressure gauge to ensure the maximum spraying pressure is not exceeded (→ *Table 1*).

All excess pressure must be released from the device before filling, after use, before carrying out maintenance work, on work breaks, and before placing it in storage.




Points to note when transporting the device: Transport the device in such a way that it is protected against damage and tipping. All excess pressure must be released from the device.

→ **Explosion hazard!**



If the device leaks at the container, immediately depressurise the device and put it out of operation!

→ **Risk of explosion!**

 You will find the illustrations referred to above in the pages 3 – 5 of these instructions for use.

Scope of delivery

Tank [1] with pump [2], hose [4] with discharge filter [34], shut-off valve [9], instructions for use [5], carrying strap [6] and spray wand [7], elbow [50], cap nut [37]. (Fig. 1)

Technical data

Type of device	3237F..	3237P..	3278P..	3278F..
Max. filling amount	5 l (1.1 gal)		8 l (1.8 gal)	
Total contents	6.9 l (1.5 gal)		10 l (2.2 gal)	
Max. spraying pressure	3 bar (43.5 psi)			
Max. operating temperature	30 °C (86 °F)		40 °C (104 °F)	
Weight when empty / Gross weight max.	1.7 / 6.7 kg (3.8 / 14.8 lb)		2.9 / 10,9 kg (6.4 / 24 lb)	
Material of tank	polyethylene			
Spray wand	brass	plastic		brass
Where device is carried	on the side			
Technical residual quantity	< 0.04 l (< 0.01 gal)			
Max. volume flow	1.0 l/min (0.22 gal/min)			
Recoil force	< 5 N			


Table 1

Assembly

1. Fasten the carrying strap [6] on the tank [1] (Fig. 2)
2. Push the hose [4] with the discharge filter [34] into the tank and secure it with the cap nut [37]. (Fig. 3)
3. Push the tube [4] into the shut-off valve [9] and secure it with the cap nut [37]. (Fig. 3)
4. Screw the spray wand [7] onto the shut-off valve [9] (Fig. 3)
5. Screw the elbow [50] onto the spray wand [7] (Fig. 3)

Checks

Visual inspection: Are the tank [1], pump [2], hose [4], shut-off valve [9], piston pressure gauge [16], and spray wand [7] and elbow [50] with nozzle [21] undamaged? (Fig. 1)


 Pay special attention to the connections between the tank – hose and the hose – shut-off valve and to the condition of the pump threading and spray wand.

No leaks: Pump up the empty device to 2 bar (29 psi) (Fig. 11).

- ▶ The pressure must not decrease more than 0.5 bar (7,35 psi) within 30 minutes.

Function: Pull up the piston pressure gauge handle [16]. (Fig. 5)

- ▶ The pressure must dissipate.

 Using the lock [40] the lever on the shut-off valve [9] can be locked and unlocked. Unintentional spraying is prevented after locking. (Fig. 14)

- ▶ If required, reset the lock [40] and activate the shut-off valve [9]. (Fig. 14)
- ▶ The shut-off valve must open and close.



Check the device regularly and after a longer period of non-use, e.g. a winter break. Have damaged parts or parts that do not work properly repaired immediately by our customer service department or by service partners authorized by us.

Preparation



Observe the instructions in the section entitled „Safety“.

The device must be in an upright position.

If filling the tank from a water line, ensure that the line or a hose does not project into the tank.

1. Pull up the red piston pressure gauge [16] until the tank is depressurized. (Fig. 5)
2. Press the piston rod with handle [13] down and turn it counterclockwise.
 - ▶ The piston rod with handle is locked. (Fig. 6)
3. Unscrew the pump [2] from the tank. (Fig. 7)
 - ☞ *We recommend you mix the spraying liquid in the device or premix it in an external tank: Fill to 1/3 with water, pour in the spraying agent, and then add more water until full.*
4. Add the spraying liquid to the tank [1] (Fig. 8)
5. Check the filling level with the scale [35] on the tank. (Fig. 8)
6. Screw the pump [2] into the tank. (Fig. 9)
7. Press the piston rod with handle [13] down and turn it clockwise.
 - ▶ The piston rod with handle is unlocked. (Fig. 10)
8. Create the desired pressure (→ Table 2) in the tank (Fig. 11)
 - ☞ *The maximum pressure should not exceed 3 bar (red line on the piston pressure gauge, Fig. 11). If the maximum pressure is exceeded, the safety valve will engage and release the excess pressure.*
9. Press the piston rod with handle [13] down and turn it counterclockwise. (Fig. 6)
 - ▶ Piston rod with handle is locked.

Spraying



Observe the instructions in the section entitled “Safety”.

Operate the device only while it is vertical or suspended upright and nearly vertical.

Avoid allowing drops of spray to drift onto areas that are not being treated.

Observe the instructions of the spray product manufacturer!

1. Hang the device over your shoulder. (Fig. 13)
 - ☞ *To prevent dripping, hold the spray wand up when first spraying and activate the shut-off valve until no more liquid mixed with air is emerging from the nozzle.*
2. If required, reset the lock [40] and activate the shut-off valve [9]. (Fig. 14)
 - ▶ Spraying may now begin.
3. Make certain the optimum spraying pressure is set (→ Table 2) on the pressure gauge [16] (Fig. 11).

Spraying pressure	Spraying rate with flat jet nozzle (original equipment)
1.5 bar (21.8 psi)	0.56 l/min (18.94 oz/min)
2.0 bar (29.0 psi)	0.64 l/min (21.64 oz/min)
3.0 bar (43.5 psi)	0.78 l/min (26.37 oz/min)

Table 2. Dependence: Spraying rate – spraying pressure

4. If the spraying pressure decreases more than 0.5 bar (7.3 psi) from the optimum level, pump some more.

☞ *If liquid mixed with air emerges from the nozzle, the tank is empty.*

After Usage



Observe the instructions in the section entitled “Safety”.
Never leave liquid in the device.

1. Pull up the red piston pressure gauge [16] until the tank is depressurized. (Fig. 5)
2. Lock the piston rod with handle [13]. (Fig. 6)
3. Unscrew the pump [2] from the tank. (Fig. 7)
4. Empty and rinse the device with clear water.



Collect and dispose of the residual liquid and the tank according to all applicable laws, requirements and regulations.
Follow the instructions of the spray product manufacturer!

5. Wipe off the device with a moist cloth.
6. For drying and storing the device, keep the tank [1] and pump [2] separate in a dry place protected from sunlight and freezing temperatures (Fig. 16).



Clean the protective equipment and yourself every time after usage.

Care and maintenance



Observe the instructions in the section entitled “Safety”.

After using the device 50 times or at least once a year:

- Unscrew the pump [2] from the tank. (Fig. 7)
- Dismantle the pump [2].
 - a) Unlock the piston rod with handle [13]. (Fig. 17)
 - b) Pull the piston rod with handle [13] out of the cylinder tube up to the stop and turn it counterclockwise (Fig. 17)
 - c) Disconnect the piston rod with handle [13] and the cylinder tube [2]. (Fig. 17)
- Grease the O-ring [19] and the diaphragm [20]. (Fig. 18)
- Assemble the pump.
 - a) Push the piston rod with handle [13] into the cylinder tube. (Fig. 20)
 - b) Hold the cylinder tube [2] and strongly press in the guiding plug [14] with your thumb. (Fig. 20)
 - c) Pull the piston rod with handle [13] up to the stop down and turn it clockwise (Fig. 20)
 - ▶ The guiding plug [14] snaps in.
- Lock the piston rod with handle [13] and screw the pump [2] into the tank [1]. (Fig. 9)
- Clean the nozzle [21] under running water. (Fig. 22)
- Remove the filter [22] of the elbow [50] and clean it under running water. (Fig. 23)
- Take the hose [4] with the discharge filter [34] out of the tank and clean the discharge filter under running water. (Fig. 24)
- Disassemble the shut-off valve [9]. (Fig. 29)
- Screw the sealing cap [45] from the valve body [44] and pull the pressure bolt [25] from the valve body [44]. (Fig. 29)
- Grease the O-rings [24] (Fig. 29)
- Assemble the shut-off valve [9].



Observe the legal requirements of your country for accident prevention and check the device in regular intervals.

Unless otherwise specified, we recommend that an expert carries out an external test every 2 years and an internal test every 5 years as well as a strength test every 10 years.

Faults



Use only original spare and accessory parts.

Fault	Cause	Remedy
No pressure builds up in the device	The pump is not screwed on tightly.	Screw the pump on tightly.
	O-ring [19] on the pump is faulty.	Replace the O-ring (<i>Fig. 19</i>).
	Diaphragm [20] is defective.	Replace the diaphragm (<i>Fig. 19</i>).
Leaky container		Immediately put the device out of operation
Liquid flows out of the pump	Valve disc [23] dirty or defective.	Clean or replace the valve disc (<i>Fig. 21</i>).
No tank pressure indication on the piston pressure gauge, Safety valves blow off too early.	Piston pressure gauge [16] is defective	For safety reasons, it is not possible to replace the safety valve/piston pressure gauge. Please contact your local MESTO specialist or MESTO directly (<i>3237P</i>). Replace the piston pressure gauge (<i>3278P</i>).
The nozzle does not spray even though pressure is present	Nozzle [21] or / and filter [22] clogged.	Clean the nozzle (<i>Fig. 22</i>) or /and filter (<i>Fig. 23</i>).
	Discharge filter [34] blocked.	Clean discharge filter (<i>Fig. 24</i>).
The shut-off valve does not close.	O-rings [24] of the pressure bolt [25] is not greased / lubricated.	Grease the O-rings of the pressure bolt (<i>Fig. 29</i>).
Liquid emerges without the lever being activated	Defective pressure bolt [25] or O-ring [24].	Replace the pressure bolt or O-rings (<i>Fig. 29</i>).

Contact address for additional information → see title page.

Warranty

We guarantee that from the time it is first purchased for a period of the legally valid required warranty period (maximum 3 years) this device will not exhibit any material or processing errors. If defects are discovered during the warranty period, the manufacturer or the distributor in your country will repair the device without charging for the labor or material or (at the discretion of the manufacturer) replace the device itself or its defective parts. If such defects are discovered, please contact us immediately. We require the invoice or cash register receipt for purchase of the device. The warranty does not include wearing parts (seals, O-rings, diaphragm, etc.) or defects, which have occurred due to improper use or unforeseeable circumstances.

Declaration of Conformity

according to EC Machinery Directive 2006/42/EC, Appendix II, No. 1A.

We, MESTO Spritzenfabrik Ernst Stockburger GmbH, Ludwigsburger Straße 71,
D-71691 Freiberg,

declare under our sole responsibility that the products pressure spraying devices of the series 3237.. and 3278.. in the version supplied comply with all relevant provisions of the Directive 2006/42/EC.

Furthermore, the device complies with the Directive 2014/68/EU for pressure equipment.

Rolf Rehkugler is authorized to compile the technical documentation.

Freiberg, 25.11.2016



Bernd Stockburger – Managing Director –

The data and illustrations in these instructions for use are for orientation only and not binding in any way. The manufacturer reserves the right to make changes or improvements to the products if these are considered appropriate without having to notify customers owning a similar model about this fact.

