

3M 85850

3M Chemical Mixing Dispenser

Model: 85850

INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your 3M Chemical Mixing Dispenser. This wall-mounted unit is designed for precise mixing and dispensing of up to four different chemical concentrates, suitable for filling both spray bottles and buckets. Please read this manual thoroughly before use and retain it for future reference.

SAFETY INFORMATION

- **WARNING:** Always wear appropriate personal protective equipment (PPE) when handling chemicals, including gloves, eye protection, and protective clothing.
- Ensure the dispenser is installed in a well-ventilated area.
- Do not mix incompatible chemicals. Refer to the chemical manufacturer's safety data sheets (SDS) for specific handling instructions.
- Verify all connections are secure to prevent leaks before operating the unit.
- The unit features Action Gap Backflow Prevention and meets ASSE 1055 Backflow Prevention Requirements. Do not tamper with this mechanism.
- Keep the dispensing cabinet locked to prevent unauthorized access to chemical concentrates.

PRODUCT OVERVIEW



Figure 1: Front view of the 3M Chemical Mixing Dispenser. The green unit features four clear windows displaying chemical cartridges, a rotary selector knob for chemical choice, and a lever for dispensing into bottles or buckets. Output hoses are visible on the right side.

The 3M Chemical Mixing Dispenser is a robust wall-mounted system designed for efficient and accurate dilution of concentrated cleaning chemicals. Key components include:

- **Chemical Cartridge Slots:** Four dedicated slots for different chemical concentrates (e.g., 3A, 34A, 17A, 8A as indicated in the image).
- **Chemical Selector Knob:** A rotary knob located in the upper center, used to select which of the four chemicals will be dispensed.
- **Dispensing Lever:** A lower lever with "ON" and "OFF" positions, controlling the flow for bottle filling (left side) and bucket filling (right side).
- **Lockable Cabinet:** Ensures secure storage of chemical concentrates.
- **Water Inlet:** Connection point for the water supply (located at the back/top, not visible in front view).
- **Output Hoses:** Two hoses for dispensing diluted solutions into bottles and buckets.
- **Action Gap Backflow Prevention:** Integrated system to prevent contamination of the water supply.

SETUP

1. Mounting:

Use the provided mounting template to mark drilling locations on a suitable wall surface. Ensure the mounting location is sturdy enough to support the unit and full chemical cartridges. Securely fasten the dispenser to the wall using appropriate hardware (not included, unless specified in packaging).

2. Water Supply Connection:

Connect a potable water supply line to the dispenser's inlet port. Ensure all connections are tight and leak-free. A shut-off valve should be installed upstream for maintenance purposes.

3. Chemical Cartridge Installation:

Open the lockable cabinet. Insert the desired chemical concentrate cartridges into their respective slots. Ensure they are seated correctly. Close and lock the cabinet.

4. Output Hose Connection:

Connect the two output hoses to their designated ports on the dispenser. One hose is typically for bottle filling, and the other for bucket filling. Ensure quick-connect fittings (if applicable) are securely engaged.

5. Initial Flush:

Before first use, perform an initial flush to clear any air from the lines. Select a chemical, place a container under the appropriate output hose, and briefly activate the dispensing lever until water flows consistently.

OPERATING INSTRUCTIONS

1. Select Chemical:

Rotate the upper chemical selector knob to align with the desired chemical cartridge. The indicator on the knob will point to the selected chemical's slot.

2. Position Container:

Place the spray bottle or bucket under the appropriate output hose (bottle fill or bucket fill).

3. Dispense Solution:

Move the lower dispensing lever to the "ON" position for the selected output (bottle or bucket). The dispenser will begin to mix and dispense the diluted chemical solution. The spray bottle fill rate is 2 gpm, and the bucket filling rate is also 2 gpm.

4. Stop Dispensing:

Once the container is filled to the desired level, move the dispensing lever back to the "OFF" position.

MAINTENANCE

• Cleaning:

Regularly wipe down the exterior of the dispenser with a damp cloth to remove dust and chemical residue. Do not use abrasive cleaners or solvents.

• Chemical Cartridge Replacement:

When a chemical cartridge is empty, unlock the cabinet, remove the empty cartridge, and insert a new one. Ensure the new cartridge is compatible with the dispenser and the intended application.

• Backflow Prevention Check:

Periodically inspect the Action Gap backflow prevention mechanism for any signs of damage or malfunction. Consult a qualified technician if issues are observed.

• Hose Inspection:

Check output hoses for kinks, cracks, or blockages. Replace damaged hoses immediately.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No flow or low flow	Water supply off or restricted Empty chemical cartridge Clogged hose or nozzle Dispensing lever not fully ON	Check water supply valve Replace empty cartridge Inspect and clear hoses/nozzles Ensure lever is fully engaged
Incorrect chemical dilution	Incorrect chemical selected Water pressure too low/high Faulty chemical cartridge	Verify chemical selector knob position Check water pressure (consult plumber if necessary) Replace cartridge
Leaks from unit	Loose connections Damaged O-rings or seals Cracked housing	Tighten all connections Inspect and replace O-rings/seals Contact 3M support for repair/replacement

SPECIFICATIONS

Model Number	85850
Brand	3M
Dimensions (H x W x D)	22-1/2 in. x 12-1/2 in. x 7 in. (Approx. 25.7 x 15.7 x 10.4 inches overall product dimensions)
Weight	13 Pounds
Number of Chemicals Dispensed	4
Spray Bottle Fill Rate	2 gpm
Bucket Filling Rate	2 gpm
Backflow Prevention	Action Gap (Meets ASSE 1055 Requirements)
Material	Plastic (Phthalate Free)
Color	Green

WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact 3M Customer Service. Refer to the contact information provided with your product packaging or visit the official 3M website.

Online Resources: [Visit the 3M Industrial Store on Amazon](#)

