PREvail®
Veterinary Disinfectants

QUICKSTART GUIDE

Mixing Station

There are three types of mixing stations for diluting Prevail concentrate:

- 985100 1-Way Ball Valve Mixing Station
- 985200 2-Way Ball Valve Mixing Station
- 985300 3-Way Ball Valve Mixing Station

These instructions will feature images of the 2-way mixing station, but they can also be applied to the 1-way and 3-way mixing stations.

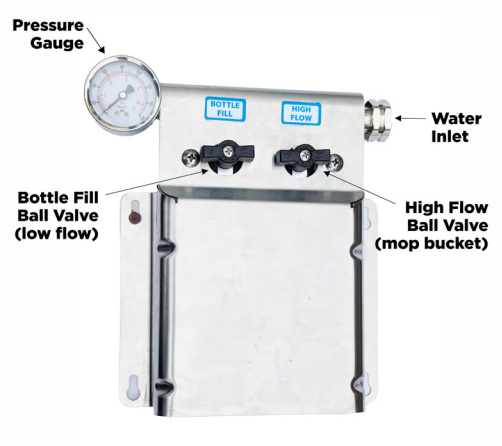
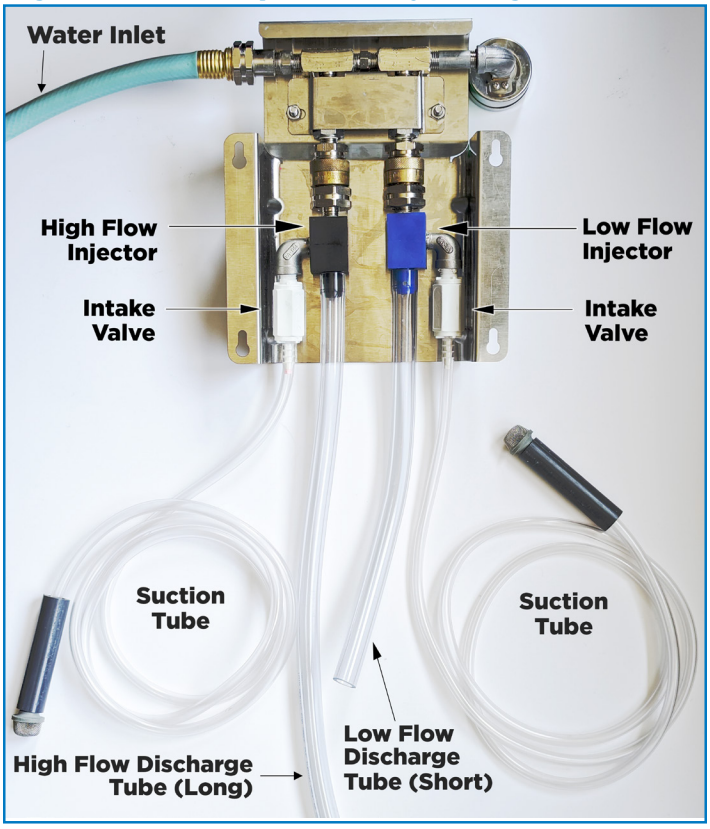
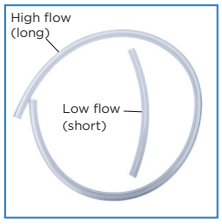


Figure 1. Final setup of a 2-way mixing station

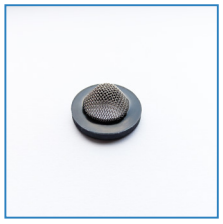


Components

1 Mixing station



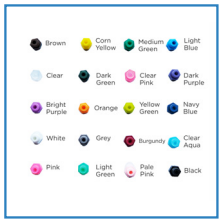
Discharge tubes:
1 High flow tube
1 Low flow tube



1 Filter

2 Suction tubes with weighted strainers

Metering tip driver



Metering tips

Additional Components Needed

- Prevail Concentrate
- Crescent or pipe wrench (optional)
- Drill
- 4 Screws and wall anchors
- Hose
- Empty mop bucket/spray bottles
- Workplace labels
- AHP1750 Test strips
- Screwdriver
- Timer

Installing the mixing station

A) Choose Your Location

We recommend an easy to access location with:

- Access to water source
- Room for a container of concentrate (ex: 18.9L container or 200L drum) below the mixing station
- Room for mop bucket
- Floor drain nearby for accidental spills
- No electrical outlets

B) Attach The Mixing Station To The Wall

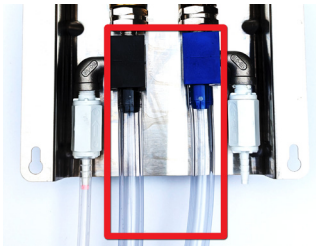
1. If you are attaching the mixing station to drywall, find a stud area to hang the mixing station.
2. Mark where you plan to drill on the wall by inserting a pencil/marker inside the 4 holes of the mixing station.

3. Insert anchors and drill into the marked holes in the wall.
4. Insert the screws halfway into the wall. This will allow you to easily remove the mixing station for the next few steps.

C) Attach Discharge Tubes

1. Remove the mixing station off the wall.
2. Attach the high flow and low flow discharge tubes to the mixing station (see Figure 1).

For 2 or 3-way mixers:



- Attach the **long** discharge tube on the **high flow** injector (**black**).
- Attach the **short** discharge tube on the **bottle fill** injector (**blue**).

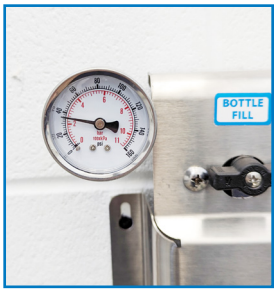
D) Connect Mixing Station to Water Source

1. Insert the filter into the water inlet opening on the mixing station, with the **bump facing out** and ensure the filter is fitted tight.
2. Attach your hose to the **faucet/water** source.
3. Attach the other end of the hose to the **water inlet opening**.

TIP To avoid leaks, use a screwdriver to push the filter into the mixing station's water inlet and use a crescent or pipe wrench to fully secure the hose to the mixing station and water source.

TIP To determine the running water pressure, read the gauge with the unit connected to the water supply and water flowing through the injector, hose, and discharge assembly provided with the unit.

E) Determine Which Metering Tip Must Be Used



Metering tips control the dilution ratio. Your facility's water pressure will determine which metering tip should be used.

1. Turn on the water faucet (cold water).
2. **Determine your water pressure** by looking at the water pressure gauge. Water pressure should be 25-125 PSI.
3. Make note of the PSI/ pressure reading.
4. Visit the website: **www.laffertyequipment.com/tools/metering-tip-calculator**

Scan the QR code to access the metering tip calculator

- The calculator will help you determine which colour metering tip is needed based on your facility's water pressure.

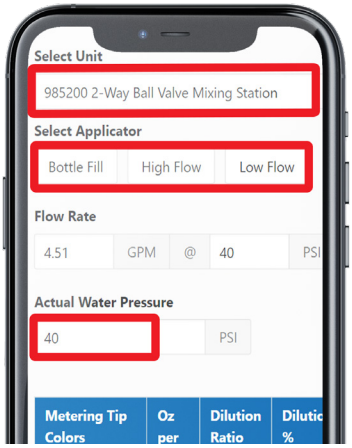
5. On the calculator, type in:

   a. The **model #** of your mixing station
      - 985100 1-Way Ball Valve Mixing Station
      - 985200 2-Way Ball Valve Mixing Station
      - 985300 3-Way Ball Valve Mixing Station

   b. Your **Actual Water Pressure** (PSI)

6. Select Bottle Fill, High Flow or Low Flow (based on which intake valve you are setting up).

7. Find your desired dilution ratio in the chart under the calculator to find the corresponding metering tip.



For Prevail concentrate you are looking for a **1:40 dilution ratio. Start with 1:40** or the closest option that is **stronger** (ex. 1:39, 1:38, etc...)

Note: in the calculator, the ratio will be backwards (ie. 40:1)

EXAMPLE For a 2-way mixing station with **High Flow** selected at **40 PSI**, the closest ratio to 1:40 is **1:38** (38:1 in the calculator) and the corresponding metering tip is "**Light Blue**"

Most common metering tips for Prevail Concentrate				
	PSI	**Target Dilution Ratio**	**Calculator Dilution Ratio**	**Metering Tip Colour**
High Flow	40	1:40	38:1	Light Blue
Bottle Fill	40	1:40	37:1	White

F) Insert the Metering Tip

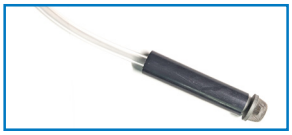
1. Insert the selected tip into the concentrate **intake** valves (**white** valves, see Figure 1) using the tip driver included. **DO NOT OVERTIGHTEN.**

2. Attach suction tube to the intake valve, make sure it's pushed over all 3 ridges.

3. With gloves, open the container of concentrate solution.

4. Drop the other end (weighted end) of the suction tube into the concentrate container.

5. Make sure the discharge tube is attached to the injector (the **high flow** injector is **black** and the **bottle fill** injector is **blue**). Place the other end in a mop bucket.

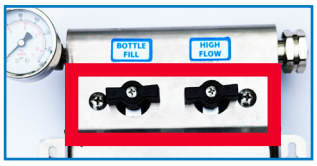


Weighted end of suction tube

6. Place mixing station back on wall.

G) Run Solution To Remove Air Bubbles In The Suction Tube

1. Turn on the ball valve you are calibrating all the way. Make sure the water is turned on too. You should see **concentrate moving up the suction tube**.



Ball valves

2. Briefly let the solution run into a mop bucket until no air bubbles are present in the suction tube. This may take up to 60 seconds.

3. Turn off the ball valve.

4. Dump out this solution from the mop bucket. The initial solution will not be diluted correctly.

5. Dispense a small amount of solution from the mixing station into an empty container for testing.

H) Use AHP1750 Test Strip to Check Sample Solution

1. Dip the padded end of the strip into the solution (not the foam) for 1 second. Do not shake the strip.

2. Remove strip from the solution and hold the strip horizontally and time for **35 to 40 seconds**. Note: Strip must be read between 35 to 40 seconds.

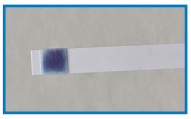
3. Compare the test strip to the colour swatch on the bottle that is indicated for your dilution rate.

NOTE Delayed reading of the strip color may invalidate the results. The strip will continue to darken after read time.

4. Validate how the test strip appears below:

☑Good Colour Match:
If the test strip matches the colour on the bottle for the desired 1:40 dilution, then you have selected the correct metering tip!

☒Test Strip Colour Too Dark:



- The solution has too much concentrate and is **too strong**.
- Select a new tip that has a **higher dilution** ratio by referring to the metering tip calculator list.

TIP The new metering tip you select should have a **smaller** hole.
The tip should be **higher** on the Metering Tip Index (Figure 2).

☒Test Strip Colour Too Light:

- The solution has **too little concentrate** and is **too weak**.
- Select a new tip that has a l**ower dilution ratio** by referring to the metering tip calculator list.

TIP The new metering tip you select should have a **larger** hole.
The tip should be **lower** on the Metering Tip Index (Figure 2).

5. Repeat steps F-H as needed until you reach a good colour match.

I) Repeat Steps D-I To Set-Up Any Additional Valves (High Flow, Bottle Fill, Etc.)

1. Fasten mixing station firmly to the wall.
2. Setup is complete!

Reminder: Do periodic test strip checks to ensure unit is running effectively.

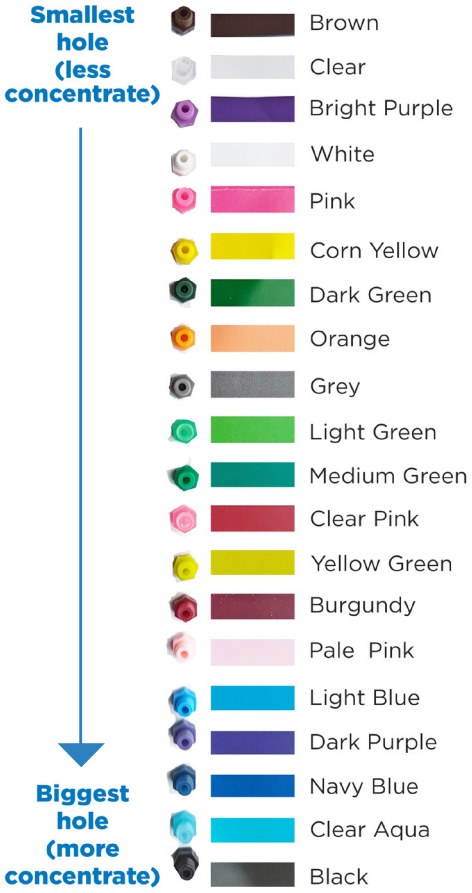


Figure 2. Metering Tip Index

The **higher** the metering tip is on the index, the **less concentrate** it will dispense into the mix.

The **lower** the metering tip is in the index, the **more concentrate** it will dispense into the mix.

Note: Virox Technologies Inc. are the manufacturers of Prevail Disinfectants and provide recommendations on equipment that have been validated to be compatible with the solutions. However, Virox Technologies Inc. are not the manufacturers of the equipment itself.

For replacement parts, questions on equipment warranty or other concerns, please contact Lafferty Equipment, the manufacturers.

https://www.laffertyequipment.com/contact | Toll Free: 1-800-999-2820

Now you're ready to automatically dilute your Prevail Concentrate and experience the benefits of a mixing station!

Save Time and Labor •Improved Compliance • Staff Safety

www.PrevailDisinfectants.ca

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