

Operating Your Soniclean® Ultrasonic Cleaner

MIDMARK®

FILLING OPERATION

STEP 1 Select a cleaning solution suitable for your application. Refer to "CLEANING SOLUTIONS" (opposite side of this sheet) to select the appropriate cleaner and correct concentration.

STEP 2 Allowing for the volume of the parts you will be cleaning and the cleaning solution, fill the unit with warm tap water to the operating level line.

STEP 3 Add appropriate cleaning solution to the tank water.

STEP 4 Plug unit into a grounded outlet (GFCI).



EQUIPMENT ALERT

If this is the first time you are running a cleaner, or if you have changed cleaning solutions, you **must** run a 5 to 10 minute "degas" cycle with no instruments in the tank. Turn on the unit by rotating the timer knob. If you place the cover on the unit, the solution will continue to heat and will stabilize near 60 degrees centigrade (140 degrees F).

NOTE

Refer to Tank Optimization tips on opposite side of this sheet to maximize the efficiency of your chemistry.

GENERAL OPERATION

STEP 1 Place the items into a basket, perforated tray, or other device for suspending instruments or parts above the bottom of the tank.

NOTE

If using beakers or a solid tray, add cleaning solution to beakers or tray to cover the item.

STEP 2 Slowly lower the tray or beakers into the tank. Do not allow items to contact the tank bottom. Do not aerate the solution.

STEP 3 Set the TIMER for the amount of time you wish the items to be cleaned.



CAUTION

To stop ultrasonics at any time, turn **TIMER** to zero.

STEP 4 When timer shuts down or when items are clean, slowly remove items from the cleaning solution.

STEP 5 Rinse the items with clean water and dry them if necessary.

NOTE

Refer to Optimization & Application tips on opposite side of this sheet for ways to maximize the efficiency of your operation.

Please refer to the Installation and Operation Manual for warranty and more specific product information.

OVER FOR CLEANING SOLUTION & TIPS

DRAINING (Initial Connection)

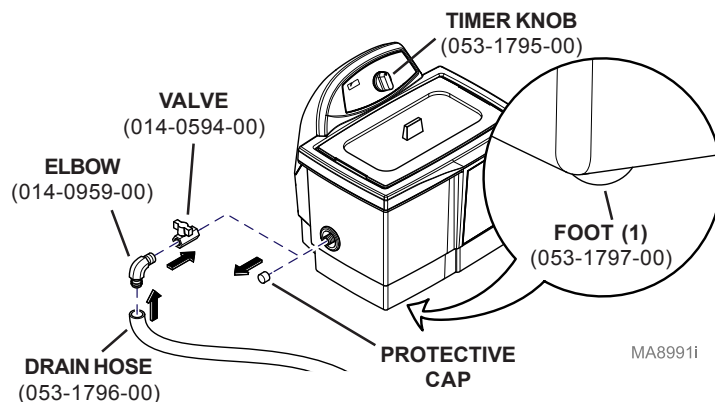


WARNING

Never immerse the entire unit in water to clean. Always unplug from power source when draining or cleaning.

STEP 1 Position the cleaner so the drain tube will easily reach into a waste disposal unit.

STEP 2 Remove protective cap from end of drain pipe. This will expose white teflon sealing tape on the drain pipe's threads.

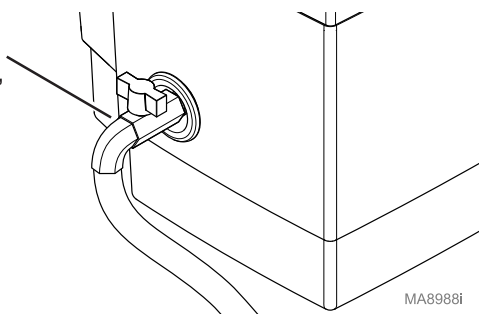


CAUTION

Over tightening of the valve can cause damage to the ultrasonic tank. Always use teflon tape or paste designed for use with stainless steel if replacement of valve is required.

STEP 3 Hand tighten drain valve onto drain pipe over tape. Finish tightening using 21mm wrench, turning no more than 1 full turn until the shutoff handle is on top.

ASSEMBLED
DRAIN
(IN "CLOSED"
POSITION)



STEP 4 Hand tighten the elbow into the end of the drain valve. Slide drain hose over the barbed end of the elbow.

DRAINING OPERATION

STEP 1 To open the valve and drain the cleaner, turn the handle so it is in line with the valve body. Close the drain by turning the handle perpendicular to the valve body and tank is ready to fill with solution.

Optimizing Your Soniclean® Ultrasonic Cleaner

TANK OPTIMIZATION

Cleaning - Check the tank for contamination whenever you change solution. If necessary, remove contaminants with a nonabrasive cloth and water.

Emptying - Always unplug the cleaner before draining the tank into an appropriate waste disposal unit.

Filling - Always unplug the cleaner before filling the tank. Fill the tank to the operating level using warm tap water.

Low Solution Level - This situation will cause the cleaner to fail. When you remove heavy or bulky loads from the unit the solution level may drop below the operating level. If so, be sure to replace lost solution and degas, if necessary, depending on the amount used.

Overload - Do not rest any item on the tank bottom. Weight on the tank bottom dampens sound energy and will cause damage to the transducer. Instead, use a tray and/or other fixture to support all items. Allow at least one inch between beaker or receptacle for adequate cavitation.

Covers - Allow the cleaner to heat up faster, to a higher temperature, and avoid excessive liquid evaporation.

SOLUTION OPTIMIZATION

Solution Activity - The amount of visible activity is not necessarily related to optimum cavitation for cleaning.

Degassing - Fresh solution can contain dissolved gases (usually air) which reduces effective ultrasonic action. Although solutions will naturally degas over time, operating the ultrasonics without parts speeds up the degassing process. Solution that has been sitting unused for 24 hours or longer has reabsorbed some gases.

Surface Tension - This condition can be reduced by adding solution to the bath. Reducing surface tension increases cavitation and enhances cleaning.

Solvents - Never use solvents. Vapors of flammable solutions will collect under the cover where ignition is possible from electrical components.

Renewal - Suspended soil particles on the bottom of the tank, inhibit ultrasonic activity. For optimum cleaning of general instruments in medical and dental applications, Midmark recommends replacing the cleaning solution once per day. If cleaning heavily contaminated instruments, it may be necessary to change the solution more frequently.

APPLICATION HINTS

First Time Cleaning - First experiment with one piece, then proceed with the remainder of the parts.

Solution Level - Be sure to maintain solution level within 1/2 inch of the tank's "operating level" line. Solution activity can vary with liquid level.

Load Size - It is faster and more efficient to run several small loads rather than a single large load.

Placing Items - Never allow items to sit on the bottom of the tank. Always place them in a tray or beaker or suspend in the cleaning solution.

Rinsing Items - After cleaning, use a clean water bath to rinse away chemicals that may adhere to cleaned items.

Lubricating Items - When necessary, re-lubricate items immediately after cleaning.

Drying Items - Air drying at room temperature works for some items. Place parts requiring faster drying time under hot air blowers or in an oven.

Please refer to the Installation and Operation Manual for warranty and more specific product information.

CLEANING SOLUTIONS

GENERAL PURPOSE CLEANER

(PT. NO 9A296001)

DIRECTIONS FOR USE

1. Loosen measuring reservoir cap 1/2 turn.
2. Squeeze to 1 oz. (30ml) mark.
3. Remove cap and pour into tank.

One ounce (30ml) of Midmark super concentrated Ultrasonic Cleaning Solution makes 1 gallon (3.8L) of cleaning solution. Add 1 ounce (30ml) to each gallon of water used in your ultrasonic tank.



CAUTION

Not for internal use. Do not mix with other chemicals. Do not refill. Do not ship or store below freezing.

EMERGENCY TREATMENT

Skin: Wash thoroughly with water.

Eyes: Flush immediately for 15 minutes with water. Get medical attention.

Spills: Flush with water. Remove contaminated clothing; wash clothing before reuse.

Internal: Do not induce vomiting. Drink 2 or 3 glasses of water or milk. Get medical attention.



CAUTION

Keep out of the reach of children.

TARTAR AND STAIN REMOVER

(PT. NO 9A297001)



CAUTION

Keep out of the reach of children. Safety glasses and impermeable gloves recommended.

DIRECTIONS FOR USE

1. Loosen measuring reservoir cap 1/2 turn.
2. Squeeze to 1 oz. (30ml) mark.
3. Remove cap and pour into glass beaker.

One ounce (30ml) of Midmark super concentrated Tartar and Stain Remover makes six oz. (180ml) of use solution. Add 1 oz. (30ml) to five oz. (150ml) of water to produce a third of a beaker of use solution. Fully immerse item to be cleaned in solution. Avoid prolonged soaking of instruments.



CAUTION

Contains Sulfamic Acid. Not for internal use. Corrosive to skin and eyes. Avoid contact with eye and skin contact.

EMERGENCY TREATMENT

Skin: Wash thoroughly with soap and water.

Eyes: Flush immediately for 15 minutes with water. Get medical attention.

Spills: Flush with water. Remove contaminated clothing; wash clothing before reuse.

Internal: Do not induce vomiting. Drink 2 or 3 glasses of water or milk. Get medical attention.

ENZYMATIC CLEANING SOLUTION

(PT. NO 9A298001)

DIRECTIONS FOR USE

1. Loosen measuring reservoir cap 1/2 turn.
2. Squeeze to 1 oz. (30ml) mark.
3. Remove cap and pour into tank.

One ounce (30ml) Of Midmark super concentrated Enzymatic Cleaning Solution makes 1 gallon (3.8L) of cleaning solution. Add 1 ounce (30ml) to each gallon of water used in your ultrasonic tank. Cleaning time 1 - 5 minutes (in ultrasonic unit). Thoroughly rinse with water after cleaning.



CAUTION

Not for internal use. Do not mix with other chemicals. Do not refill. Do not ship or store below freezing.

EMERGENCY TREATMENT

Skin: Wash thoroughly with water.

Eyes: Flush immediately for 15 minutes with water.

Spills: Flush with water. Remove contaminated clothing; wash clothing before reuse.

Internal: Do not induce vomiting. Drink 2 or 3 glasses of water or milk. Get medical attention.



CAUTION

Keep out of the reach of children.

OVER FOR OPERATION