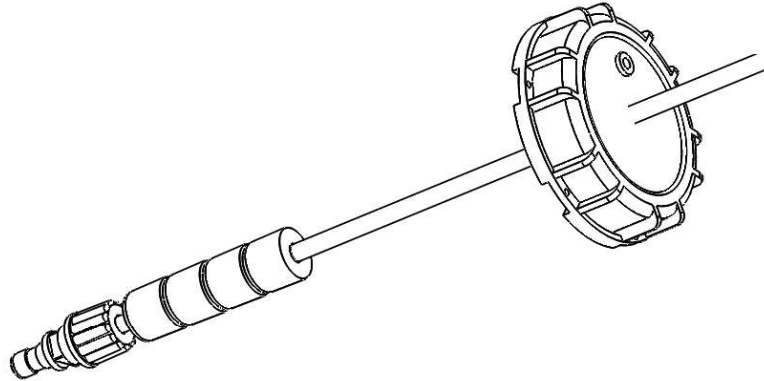


## **Hydrochloric Acid – 16.5%**

The Pool Lab ASP requires a reservoir of 16.5% hydrochloric acid for maintaining the pH of the pool water. Hydrochloric acid can be purchased pre-mixed in 15 Litre or 20 Litre drums at this strength, or you can dilute 33% acid by half with an equal amount of water. (see instructions on next page).

Replace the cap of your acid drum with the fume stop cap and weight provided and set the tube length so that the weight can reach the bottom of the drum.



**IMPORTANT:** When changing an acid drum that has been completely emptied you should always cycle the power to your Pool Lab Chlorinator control box OFF then back ON again after approximately 10 seconds. This will reset the acid feed algorithm and prevent the chance of over-feeding on the first acid delivery.

To test the acid feed, or to prime the tubing:

1. Go to the MAIN MENU (press and hold VIEW for 3 seconds)
2. Navigate to ASP TOOLS and press VIEW
3. Navigate to ACID PRIME and press VIEW
4. Press VIEW to start acid pump (will run for 60 seconds)
5. Press BACK to stop acid pump.
6. Press BACK at least three times to exit the menu system.

Always wear appropriate protective clothing such as gloves, eye protection and a suitable respirator (Type E) when handling hydrochloric acid or when servicing the acid dosing system



## Procedure to dilute 33% Hydrochloric Acid

The Pool Lab ASP has a peristaltic acid pump which is designed for use with 16.5% Hydrochloric Acid. Most pool shops stock pre-diluted 16.5% Hydrochloric Acid which is suitable for use, but if only 33% Hydrochloric Acid is available then you will need to dilute this 1:1 with fresh water prior to use.

*NOTE: While 16.5% Hydrochloric Acid will produce considerably less fumes than 33% Hydrochloric Acid, the diluted acid is still VERY DANGEROUS and VERY CORROSIVE. Always handle acid with due caution and care.*

**IMPORTANT:** The use of undiluted 33% Hydrochloric acid (or any other unapproved acid types) with your Pool Lab peristaltic acid pump will void your Pool Lab equipment warranties and may cause large pH fluctuations in the pool water. This can lead to health and safety issues and may cause damage to the pool surfaces or other equipment which will not be covered by any warranty.

### Preparation:

- This procedure must be performed outdoors in a well ventilated area
- This procedure must be performed in a location where an accidental acid spill will not cause damage to property or equipment
- **Read section “Hydrochloric Acid (Muriatic Acid) Warnings” before proceeding**
- Always wear appropriate protective clothing as shown below
- Where a SPA ONLY system exists, the total volume of diluted acid must be limited to 5 Litres
- You will need either an empty Hydrochloric Acid Drum (5, 15 or 20 Litre), or a similar container suitable for Hydrochloric Acid
- NEVER USE A CHLORINE DRUM OR ANY CONTAINER THAT HAS BEEN USED FOR CHEMICALS OTHER THAN HYDROCHLORIC ACID
- You will need a measuring jug or similar (for measuring water only), and a plastic funnel suitable for hydrochloric acid

### Procedure:

- Using a measuring jug, half fill your empty container with fresh tap water. *eg. Measure out 7.5 Litres of water for a 15 Litre container.*
- Using a plastic funnel, carefully top up the container to near full with 33% Hydrochloric acid. Take care not to over fill the container, and leave some air space (approximately 30 – 50 mm) above the liquid to allow for contraction / expansion of the container.

Always wear appropriate protective clothing such as gloves, and eye protection and a suitable respirator (Type E) when handling hydrochloric acid or when servicing the acid dosing system

