



# Ammonia Filter

The filter medium contained in the AZI ammonia filter will produce phosphoric acid if the material comes in contact with water. In the course of sampling, moisture vapor will be drawn through the filter. When the recommended intervals listed below are reached, the filter must be changed before harmful levels of acid are produced. Regardless of the humidity at the time and place of sampling operations, do not tip the filter on end but keep it level to prevent any accumulated liquid from escaping. Place the filter in a suitable container for proper disposal, refer to state and local laws. Full MSDS for the filter medium is available from Perma Pure Inc. customer service.

## Filter Performance (For Mercury Testing):

Between 4% to 6% reduction in Hg reading in the presence of 0.05 ppm to 50 ppm Ammonia levels. Arizona Instrument recommends that no more than 1,200 liters of sampled air be drawn through the filter. After this accumulated volume, the moisture content will adversely affect the filter medium and produce phosphoric acid. Total number of auto regenerations that can be performed before the filter is changed:

- 8 regenerations at 70 to 100% humidity
- 12 regenerations at 41 to 69% humidity
- 16 regenerations at 0 to 40% humidity

If the instrument is operated manually, and the ammonia filter is removed for regenerations, the total number of samples can be increased by a factor of 60 each, 30 second samples, per regeneration.

The recommended total number of samples that may be taken through the filter:

- 800 samples at 70% to 100% relative humidity
- 1,200 samples at 0% to 40% relative humidity
- A proportionate number of samples between 800 and 1,200 may be taken at 41% and 69% relative humidity
- The number of regenerations, with the filter in place in the instrument's intake, should not exceed the above limitations

## Filter Performance (For Hydrogen Sulfide (h<sub>2</sub>s) Testing):

Less than 10% reduction in h<sub>2</sub>s reading in the presence of 0.05 ppm to 50 ppm ammonia levels. Arizona Instrument recommends that no more than 1,200 liters of sampled air be drawn through the filter. After this accumulated volume, the moisture content will adversely affect the filter medium and produce phosphoric acid. Total number of auto regenerations that can be performed before the filter is changed:

- 40 regenerations at 70 to 100% humidity
- 60 regenerations at 41 to 69% humidity
- 80 regenerations at 0 to 40% humidity

If the instrument is operated manually, and the ammonia filter is removed for regenerations, the total number of samples can be increased by a factor of 60 each, 30 second samples, per regeneration. The recommended total number of samples that may be taken through the filter:

- 4,000 samples at 70% to 100% relative humidity
- 6,000 samples at 0% to 40% relative humidity
- A proportionate number of samples between 4,000 and 6,000 may be taken at 41% and 69% relative humidity
- The number of regenerations, with the filter in place in the instrument's intake, should not exceed the above limitations

The part number for the ammonia filter is 990-0183 and is available for purchase through our parts department. Please contact them directly for pricing and availability information. Please feel free to contact our customer service department at 602-470-1414 or 800-290-1414, or email Technical Support with any additional questions or concerns you may have regarding this or any other issue.



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