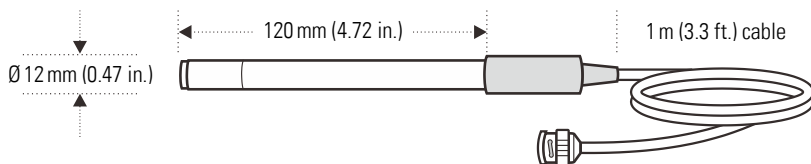
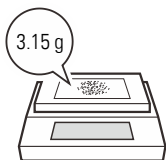


This ion selective electrode is designed for the detection and analysis of the dissolved ammonia in aqueous solution and is suitable for laboratory applications.

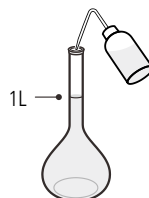


Required Equipment and Solutions

- An ion meter
- Filling solution (order code: FS-NH3)
- Ionic strength adjuster (order code: ISA-NH3)
- Volumetric flasks and beakers
- Distilled or deionized water:
To prepare the standard solutions or rinse the electrode between measurements.
- Ammonia standard solution 0.1M:
To prepare this standard solution, half fill a 1 liter volumetric flask with distilled water and add 5.35 grams of analytical grade ammonium chloride (NH_4Cl) reagent. Swirl the volumetric flask gently to dissolve the reagent and fill to the mark with distilled water. Cap and upend the volumetric flask several times to mix the solution.
- Ammonia standard solution 1000 ppm:
To prepare this standard solution, half fill a 1 liter volumetric flask with distilled water and add 3.15 grams of analytical grade ammonium chloride (NH_4Cl) reagent. Swirl the volumetric flask gently to dissolve the reagent and fill to the mark with distilled water. Cap and upend the volumetric flask several times to mix the solution.

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Prior to Use

1. Remove the membrane module and fill with filling solution.
2. Tap the side of the cap to remove air bubbles and screw the module onto the body. Do not over-tighten.

Measurement and Calibration Hints

- Do not use this electrode to measure the strongly acidic or alkaline samples, strong detergents and organic solvents, these solutions will cause permanent damage to the electrode.
 - For better accuracy, we recommend to add the ionic strength adjuster (ISA) to all of the standards and samples. A typical addition would be 2 ml ISA to 50 ml of standard and sample solutions.
 - During the calibration and measurement, ensure that all standard and sample solutions are the same temperature.
 - The calibration should from the lowest concentration standard to avoid cross contamination.
 - The sample solution must fall in the pH range of 11 to 13. If necessary, add the ionic strength adjuster.
 - Stir the standard and sample solutions at a uniform rate that will promoting the accurate of measurement.
1. Calibrate the meter according to the manufacturer's instructions.
 2. Rinse the electrode with distilled water and blot dry.
 3. Place the electrode into the sample and record the stable reading.

Electrode Maintenance

- Rinse the electrode and membrane cap thoroughly with distilled water after use.
- Never touch or scratch the ion sensitive membrane on the bottom of the electrode.
- If the electrode response becomes sluggish, soak the electrode in 100 ppm standard solution for at least 1 hour.

Specifications

Model	ISE-NH3
Concentration Range	0.01 to 17000 ppm
Slope	52 to 59 mV/decade
pH Range	11 to 13
Interferences	Hydrazine
Operating Temperature	5 to 50°C (41 to 122°F)
Electrode Dimensions	150 (L) × 12 (Ø) mm (5.9 × 0.47 in.)
Cable Length	1 m (3.3 ft.)
Connector	BNC
Body Type	Epoxy

Optional Accessories

Order Code	Description
ION-NH3	Ammonia standard solution 1000 ppm, 480 ml
ISA-NH3	Ionic strength adjuster, 480 ml
FS-NH3	Ammonia filling solution, 480 ml