

Solution Kits sold separately below include all of the solutions needed for accurate measurements. Each kit includes one reference filling pipette, one 60-mL bottle of reference fill solution, one 475-mL bottle of 1000 ppm standard solution, and one 475-mL bottle of ionic strength adjustor (except models 27502-69 and 27502-91, which come in a one-gallon bottle).

Replacement ionic strength adjustors come in 475-mL bottles (except model 27503-58, which comes in a one-gallon bottle).



Solution kit 27502-63 and ISA bottle 27503-51

Ion	Standards and fill solution kits			Replacement ionic strength adjustors [†]		
	Catalog number	Formulations for fill/standard solutions	Price	Catalog number	Solution formulation	Price
NH ₃	See adjacent ad for ordering information					
NH ₄ ⁺	GH-27502-53	0.1 M NaCl/ 1000 ppm as N		GH-27503-53	5 M NaCl	
Br ⁻	GH-27502-55	1 M KNO ₃ / 1000 ppm as Br ⁻		GH-27503-51	5 M NaNO ₃	
Cd ⁺	GH-27502-57	1 M KNO ₃ [‡]		GH-27503-51	5 M NaNO ₃	
Ca ⁺²	GH-27502-59	4 M KCl/ 1000 ppm as Ca ⁺²		GH-27503-52	4 M KCl	
Cl ⁻	GH-27502-63	1 M KNO ₃ / 1000 ppm as Cl ⁻		GH-27503-51	5 M NaNO ₃	
Cu ⁺²	GH-27502-65	1 M KNO ₃ / 1000 ppm as Cu ⁺²		GH-27503-51	5 M NaNO ₃	
CN ⁻	—	—		—	—	
F ⁻	GH-27502-69	4 M KCl/ 1000 ppm as F ⁻		GH-27503-58	TiSAB I	
I ⁻	GH-27502-73	1 M KNO ₃ / 1000 ppm as I ⁻		GH-27503-51	5 M NaNO ₃	
Pb ⁺²	—	—		GH-27503-56	5 M NaClO ₄	
NO ₃ ⁻	GH-27502-79	0.1 M (NH ₄) ₂ SO ₄ / 1000 ppm as NO ₃ ⁻		GH-27503-60	2 M (NH ₄) ₂ SO ₄	
ClO ₄ ⁻	GH-27502-85	0.1 M (NH ₄) ₂ SO ₄ / 1000 ppm as ClO ₄ ⁻		GH-27503-60	2 M (NH ₄) ₂ SO ₄	
K ⁺	GH-27502-89	0.1 M NaCl/ 1000 ppm as K ⁺		GH-27503-53	5 M NaCl	
Ag ⁺ / S ⁻²	GH-27502-91	1 M KNO ₃ / 1000 ppm as Ag ⁺		GH-27503-51	5 M NaNO ₃	
Na ⁺	GH-27502-93	0.1 M NH ₄ Cl/ 1000 ppm as Na ⁺		GH-27503-54	4 M NH ₄ Cl with 4 M NH ₄ OH	
X ⁺ /X ⁻	GH-27502-95	0.05 M Hyamine® and 0.01 M SLS ^{††}		—	—	
Ca ⁺² / Mg ⁺²	GH-27502-99	4 M KCl/ 1000 ppm as Ca ⁺²		GH-27503-52	4 M KCl	

[†]A 475-mL bottle of ionic strength adjustor is supplied with kit.

[‡]Customer-formulated standard solution required. ^{††}None required.

Cole-Parmer® Ammonia Ion-Selective Electrodes

Combines reference electrode and half-cell

- Fast and accurate readings in less than 30 seconds
- Save money with easily changeable membranes
- Measure concentrations to 17,000 ppm

Single-junction ammonia electrodes feature durable, epoxy bodies. The electrode with loose membranes is for users who prefer that style of installation. The electrode with pre-membraned caps makes electrode membrane replacement easier. Use electrodes with almost any existing meter.

What's included: 3.3-ft (1-m) cable and BNC connector, 15 mL of electrolyte, replacement membrane, and filling pipette. Order standards, ionic strength adjustors, and fill solution separately below.

Cole-Parmer®

“Excellent performance.”



Type	Concentration range	Temp/ pH range [†]	Interferences	Catalog number	Price
Electrode with loose membranes					
Gas sensing	5 x 10 ⁻⁷ to 1.0 M (0.01 to 17,000 ppm)	0 to 50°C/ above 11	Volatile amines	GH-27502-00	
Electrode with pre-membraned cap					
Gas sensing	5 x 10 ⁻⁷ to 1.0 M (0.01 to 17,000 ppm)	0 to 50°C/ above 11	Volatile amines	GH-27512-00	

[†]Optimal pH range for direct measurement

Accessories

GH-27503-00 Ammonia standard,
0.1 M NH₄Cl, 475-mL bottle

GH-27503-93 Ammonia standard,
1000 ppm ammonia as nitrogen, 475-mL bottle

GH-27503-94 Ammonia standard,
100 ppm ammonia as nitrogen, 475-mL bottle

GH-05730-51 Ionic strength adjustor,
NaOH and EDTA, 475-mL bottle

GH-27503-71 Ammonia fill solution,
0.1 M NH₄Cl, 125-mL bottle

GH-27503-95 Replacement membranes.

Ten membrane tapes, one O-ring, and tweezers

GH-27512-95 Replacement membrane caps
for 27512-00. Pack of 3