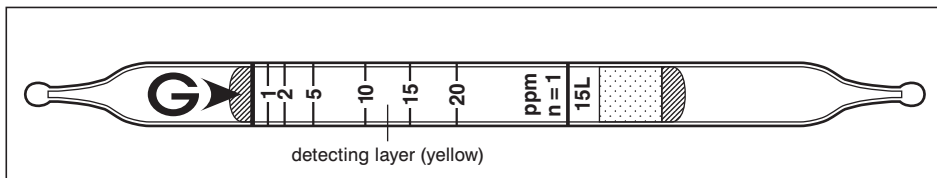


# Nitric Acid $\text{HNO}_3$

No.15L



## Performance

Measuring range	0.1 to 1 ppm	1 to 20 ppm	20 to 40 ppm
Number of pump strokes	2 to 10 (200 to 1000ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1/2 to 1/10	1	2
Sampling time	1 to 5 min	30 sec	30 sec

Detecting limit : 0.05 ppm (10 pump strokes)

Colour change : Yellow → Reddish purple

Corrections for temperature & humidity : Humidity correction is necessary.

Relative standard deviation : 15 % (for 1 to 5 ppm), 10 % (for 5 to 20 ppm)

Shelf life : 3 years

## Reaction principle

$\text{HNO}_3 + \text{Indicator} \rightarrow \text{Reaction product}$

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Hydrogen chloride	$\cong 1/10$	+	Reddish purple
Chlorine		No	Bleaches
Carbon monoxide		No	} No
Nitrogen dioxide		No	
Organic solvents		No	

## Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Hydrogen bromide	Factor : 0.8	1	0.8 to 16 ppm
Trichloroacetic acid	by scale	1	1 to 37.5 ppm

## Calibration gas generation

High pressure gas cylinder method