

More about Gastec detector tubes

Gastec detector tubes' filling reagents and external appearances vary depending upon the target substances and the concentrations to be measured.

■ Filling reagents

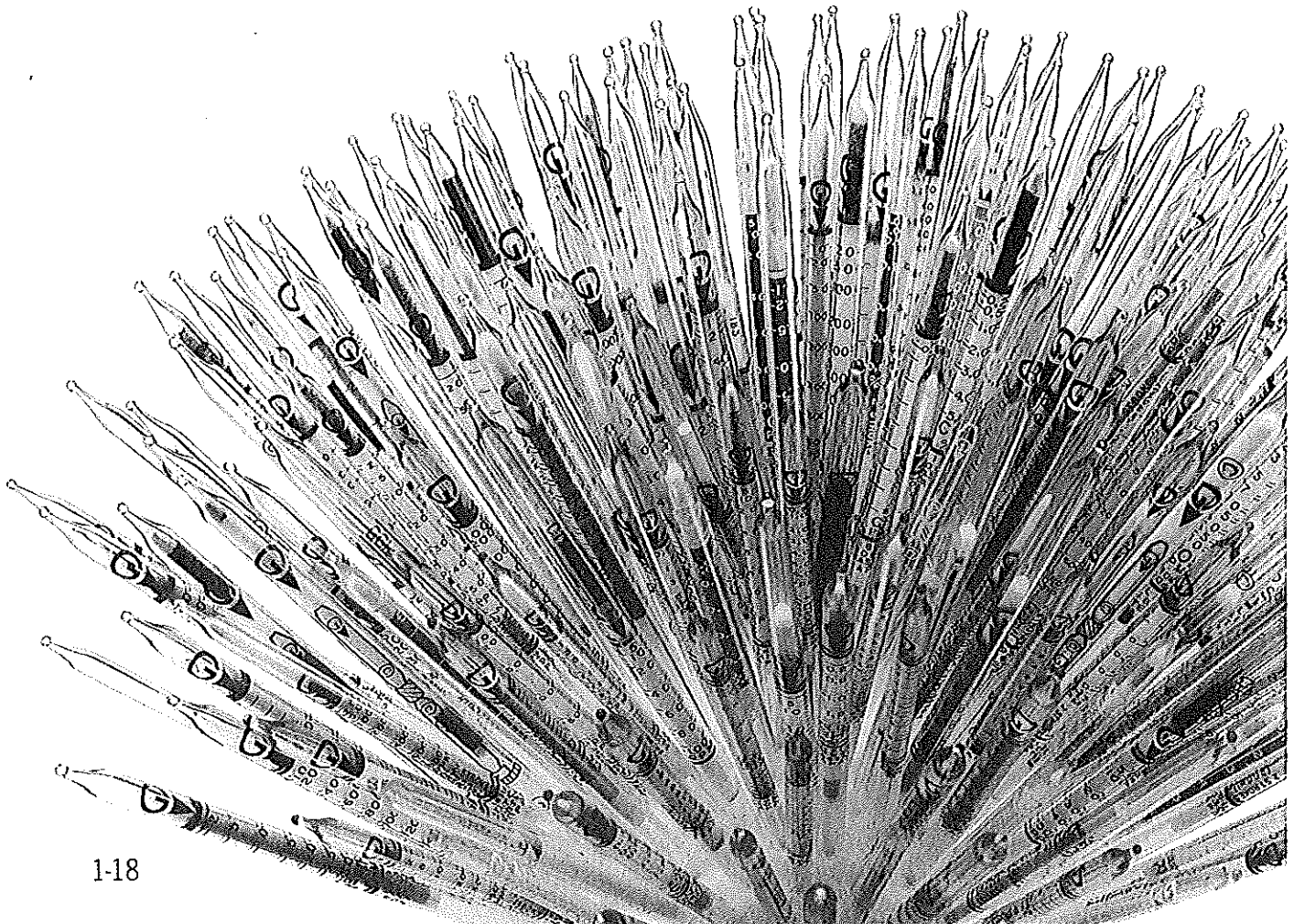
There are two types of filling reagents: detecting reagents and pretreatment reagents.

● Detecting reagents

Detecting reagents are located behind the calibration scale. They are special chemicals adsorbed onto carriers such as silica gel, alumina, or silica sand, and produce a distinct layer of colour change by the reaction with the target substance.

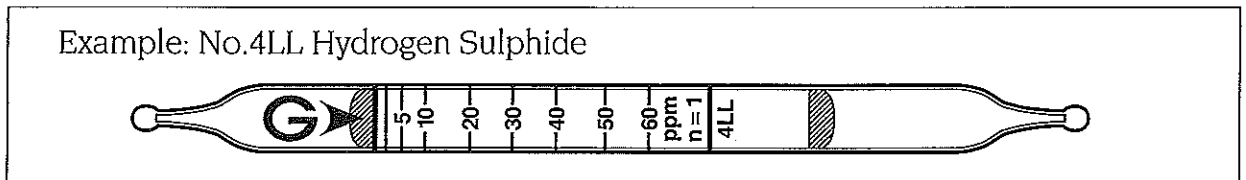
● Pretreatment reagents

Pretreatment reagents are located in front of detecting reagents to make the samples more sensitive to the detecting reagents. There are three types of pretreatment reagents: oxidiser, interfering gas scrubber and dehumidifier. They also consist of special chemicals adsorbed on carriers.

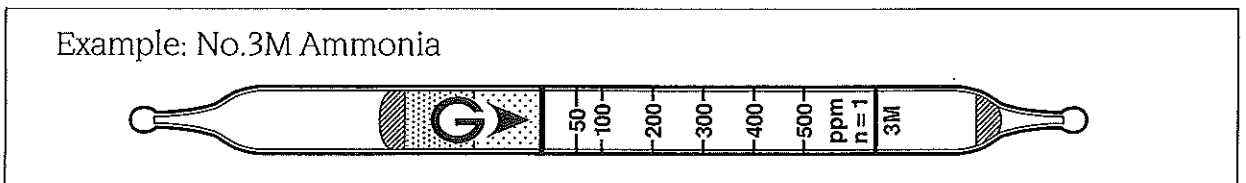


Gastec detector tubes can be roughly classified into three types in terms of the filling reagents.

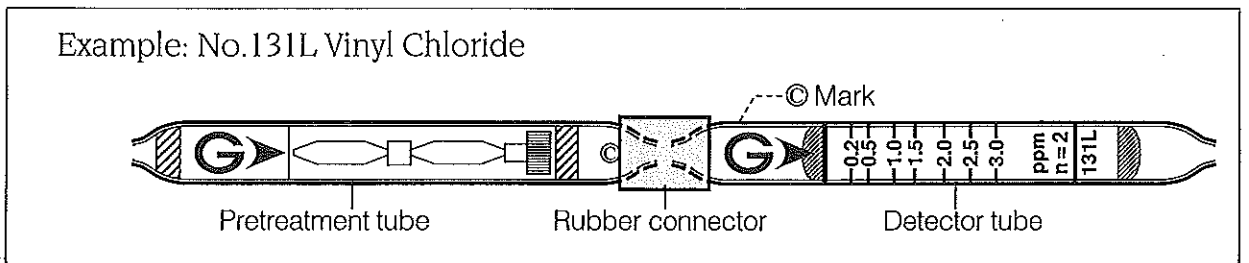
(1) Single tube filled with detecting reagent.



(2) Single tube filled with pretreatment reagent and detecting reagent.



(3) Twin tube consisting of a pretreatment tube filled with pretreatment reagent and a detector tube filled with detecting reagent.



Note: No. 103 Hydrocarbons (C₂ ~C₇) twin tube consists of the detector tube filled with detecting reagent and the filter tube with filling to scrub SO₃ generated by the reaction in the detector tube.

The No. 10 Nitrogen Oxides or No.45S Hydrogen Sulphide and Sulphur Dioxide twin tube consists of two detector tubes each filled with different detecting reagent to measure two different substances separately at a time.