Information Data Sheet
Detector Tube   SO$_2$-1
Part No. (US):   487338
Part No.   D5085803

KWIK DRAW
UNIPHOS

1. Application

Detection of sulfur dioxide (SO$_2$) in air or in technical gases.
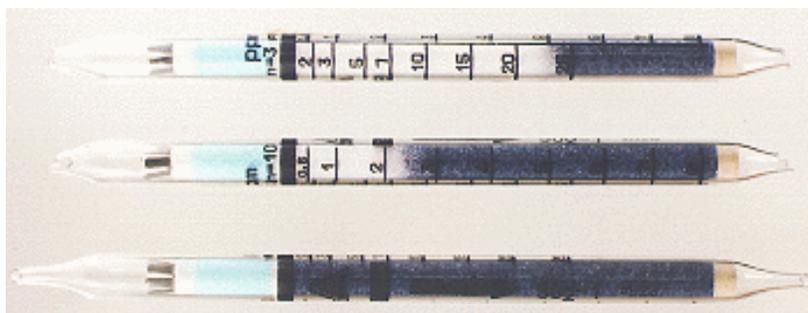
2. Detector Tube Sampling Pump

UNIPHOS KWIK DRAW(formerly MSA AUER) Gas-Tester® IIH, Gas-Tester® I / ThumbPump™-Sampler, Toximeter® II, Uniphos Kwik-Draw™-Pump or other suitable detector tubes pumps. Observe respective instructions for use.

3. Measuring Range

1 ppm … 25 ppm sulfur dioxide at n=3 (3 strokes).
0.5 ppm ...8 ppm sulfur dioxide at n=10 (10 strokes).

4. Chemical Reaction and Color Change

Reaction of sulfur dioxide with iodine. Iodine will be reduced to iodide.
Color change: violet   →   white.

5. Ambient Conditions During Sampling

• Detector tubes can be used between 10°C and 30°C (50°F and 86°F) and between 10% rh (0.9 g/m^3 at 10°C [50°F]) and 90% rh (27 g/m^3 at 30°C [86°F]).

6. Interferences and Cross Sensitivities

a) No interference from:
   – higher saturated hydrocarbons (e. g. hexanes, octanes), aromatic hydrocarbons (e. g. benzene) up to 1000 ppm.
   – hydrogen sulfide up to 100 ppm (n=3) or 40 ppm (n=10). Hydrogen sulfide will be retained by the protective layer changing its color (light blue → brown). Do not use the detector tube if protective layer has totally change its color.
   – hydrogene chloride up to 25 ppm (n=3) or 10 ppm (n=10).

b) Chlorine, ammonia, nitrogene dioxide, olefinic hydrocarbons (e. g. ethylene) are not indicated but possibly will shorten indication stain of sulfur dioxide even when concentrations correspond to the measuring range of detecdtor tube.