Information Data Sheet

KWIK DRAW
UNIPHOS

Detector Tube Nitr.-HP

Part No. (US): 655790
Part No. D5086850

1. Application

Detection of nitrous fumes (nitric oxide + nitrogen dioxide, $NO + NO_2$) in compressed air.

2. Sampling Device

KWIKDRAW (formerly AUER/MSA) Airtester HP, KWIKDRAW (formerly AUER/MSA) Airtester MP, observe included instructions for use.
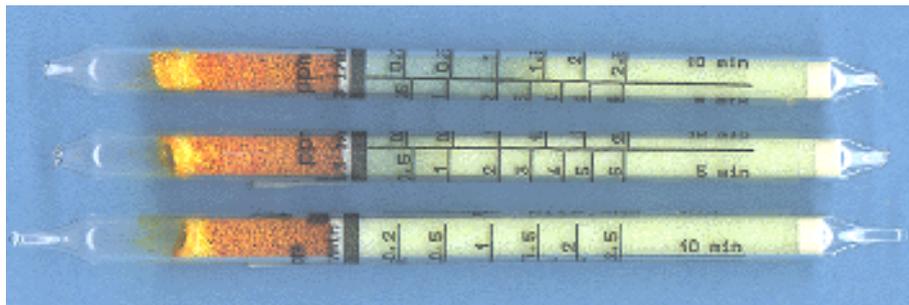
3. Measuring Range

0.2...2.5 ppm nitrous fumes for a 3.0 L sample.
0.5...6.0 ppm nitrous fumes for a 1.5 L sample.

4. Chemical Reaction and Color Change

Oxidation of an aromatic amine by nitrogen dioxide. Nitric oxide does not change color of the indicating layer, it has to be oxidized in the conversion layer to nitrogen dioxide.

Color change: White or light blue →   Dark blue

5. Influence of Temperature and Humidity

Detector tubes can be used without compensation of the reading between 5 °C and 35 °C (40 °F and 95 °F) and up to 90% rh [36 g/m^3 at 35 °C (95 °F)].

6. Interferences and Cross Sensitivities

a) No interference from:
   – hydrogen, methane, ethane, propane, carbon monoxide, carbon dioxide.
   – nitrous oxide up to 0.2 vol %.
   – higher saturated hydrocarbons (e.g. butanes, octanes), aromatic hydrocarbons (e.g. benzene), sulfur dioxide up to 200 ppm.
   – hydrogen chloride, hydrogen cyanide, phosgene up to 20 ppm.

b) olefinic hydrocarbons (e.g. ethylene), hydrogen sulfide, ammonia are not indicated, but possibly will shorten the indication stain of nitrous fumes.

c) halogens (chlorine, bromine), chlorine dioxide, ozone will be indicated. The sensitivity of indication is different.