Carbon Monoxide 2/a

Order No. 67 33 051

Application Range

Standard Measuring Range:	2 to 60 ppm	/ 25 to 300 ppm
Number of Strokes n:	10	/ 2
Time for Measurement:	approx. 4 min	/ 50 sec.
Standard Deviation:	± 10 to 15 %	
Color Change:	white → brownish pink/green	

Ambient Operating Conditions

Temperature:	0 to 50 °C
Absolute Humidity:	2 to 20 mg H_2O / L

Reaction Principle

$5\ CO + I_2O_5 \rightarrow I_2 + 5\ CO_2$

Cross Sensitivity

The following have no influence on the display of 10 ppm CO (respectively):

100 ppm hydrogen sulphide

50 ppm sulphur dioxide

15 ppm nitrogen dioxide

10 ppm CO + 200 ppm octane: display approx. 30 ppm

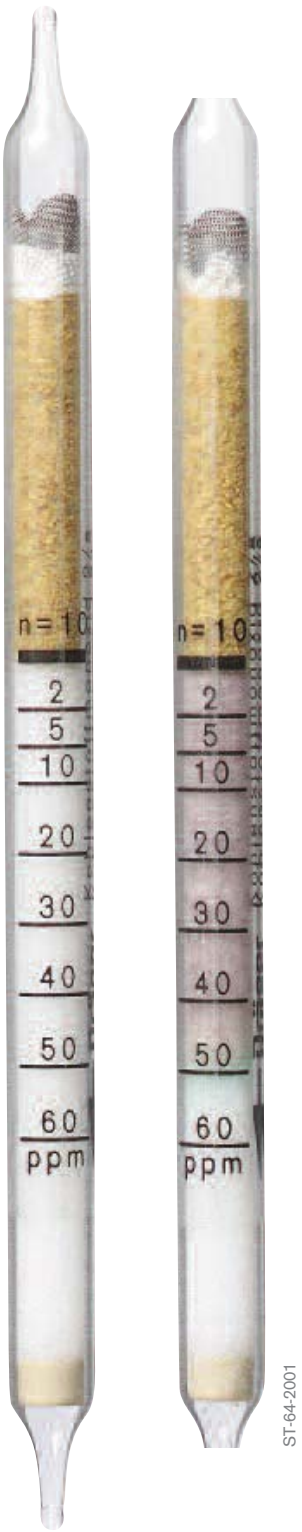
10 ppm CO + 40 ppm butadiene: display approx. 15 ppm

10 ppm CO +30 (100) ppm benzene: display approx. 15 (20 - 30) ppm

10 ppm CO + 40 ppm chloroform: display approx. 60 ppm

10 (60) ppm acetylene: display approx. 5 (15) ppm

With the insertion of a carbon attachment tube (CH 24101), 10ppm CO can still be measured in the presence of 10000 ppm n-octane



ST-64-2001

Carbon Monoxide 5/c

Order No. CH 25 601

C

Application Range

Standard Measuring Range:	100 to 700	/ 5 to 150 ppm
Number of Strokes n:	1	/ 5
Time for Measurement:	approx. 50 sec.	/ approx. 150 sec.
Standard Deviation:	± 10 to 15 %	
Color Change:	white → brownish-green	

Ambient Operating Conditions

Temperature:	0 to 50 °C
Absolute Humidity:	max. 50 mg H_2O / L

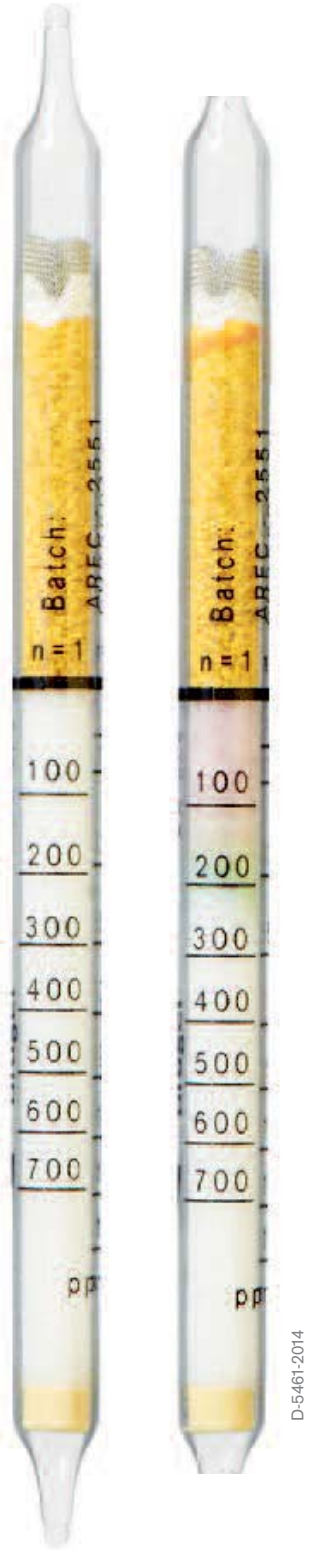
Reaction Principle

$$5\ CO + I_2O_5 \xrightarrow{H_2S_2O_7} I_2 + 5\ CO_2$$

Cross Sensitivity

The following have no influence on the display of 10 ppm CO (respectively):

200 ppm n-octane, with carbon attachment tube (CH 24101)
10000 ppm
30 ppm benzene
100 ppm hydrogen sulphide
50 ppm sulphur dioxide
15 ppm nitrogen dioxide
40 ppm butadiene
10 ppm CO + 100 ppm benzene: display approx. 20 ppm
10 ppm CO + 40 ppm chloroform: display approx. 60 ppm
10 (60) ppm acetylene: display 8 (20) ppm



D-5461-2014

Carbon Monoxide 8/a

Order No. CH 19 701

Application Range

Standard Measuring Range:	8 to 150 ppm
Number of Strokes n:	10
Time for Measurement:	approx. 2 min
Standard Deviation:	± 10 to 15 %
Color Change:	white → pale brown

Ambient Operating Conditions

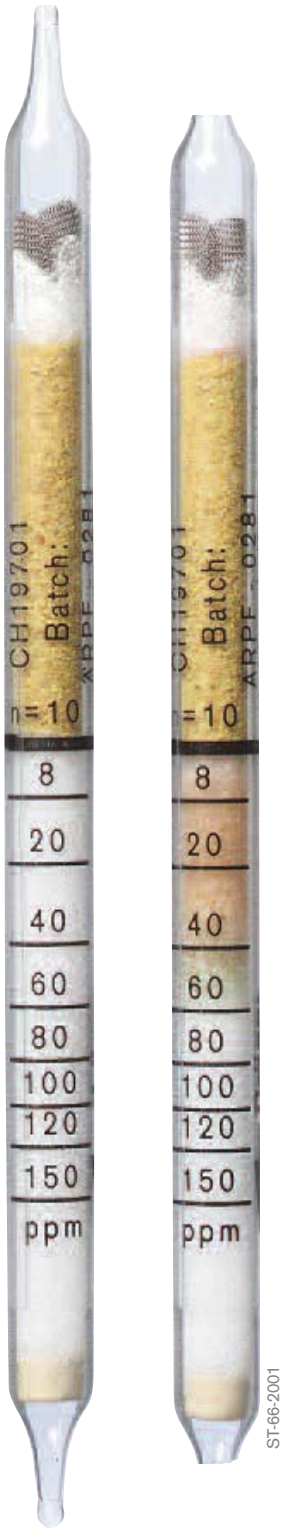
Temperature:	0 to 50 °C
Absolute Humidity:	< 50 mg H_2O / L

Reaction Principle

$$5\ CO + I_2O_5 \rightarrow I + 5\ CO_2$$

Cross Sensitivity

Acetylene is also indicated, however, with less sensitivity. Petroleum hydrocarbons, benzene, halogenated hydrocarbons and hydrogen sulfide are retained in the pre-layer. In the case of higher concentrations of interfering hydrocarbons, use should be made of a carbon pre-tube (CH 24 101). Higher concentrations of easily cleavable halogenated hydrocarbons (e.g. trichloroethylene), are liable to form chromyl chloride in the pre-layer which changes the indicating layer to a yellowish-brown. CO determination is impossible in the case of high olefin concentrations.



Carbon Monoxide 10/b

Order No. CH 20 601

C

Application Range

Standard Measuring Range:	100 to 3,000	/ 10 to 300 ppm
Number of Strokes n:	1	/ 10
Time for Measurement:	approx. 20 s	/ approx. 4 min
Standard Deviation:	± 10 to 15 %	
Color Change:	white → brown green	

Ambient Operating Conditions

Temperature:	0 to 50 °C
Absolute Humidity:	max. 50 mg H_2O / L

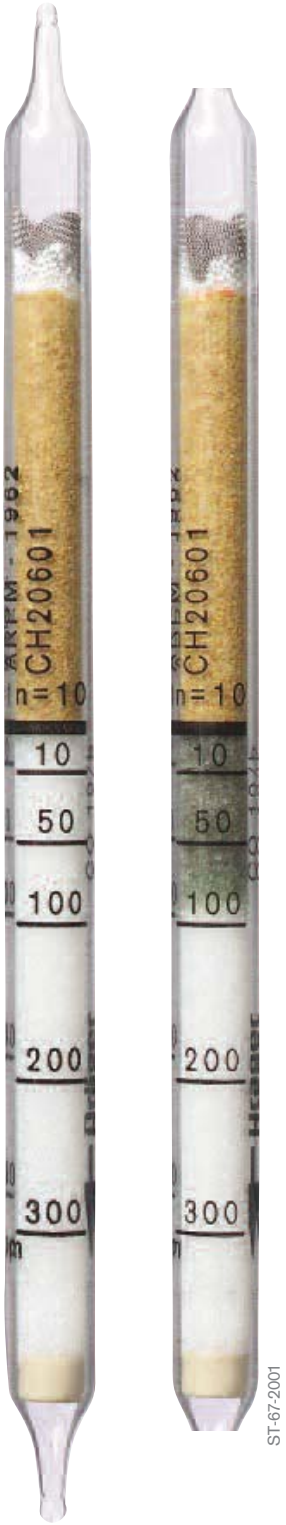
Reaction Principle

$$5\ CO + I_2O_5 \xrightarrow{H_2S_2O_7} I_2 + 5\ CO_2$$

Cross Sensitivity

The following have no influence on the display of 10 ppm CO (respectively):

200 ppm n-octane, with carbon attachment tube (CH 24101)
10000 ppm
30 ppm benzene
100 ppm hydrogen sulphide
50 ppm sulphur dioxide
15 ppm nitrogen dioxide
40 ppm butadiene
10 ppm CO + 100 ppm benzene: display approx. 30 ppm
10 ppm CO + 40 ppm chloroform: display approx. 35 ppm
10 (60) ppm acetylene: display 0 (70) ppm



ST-67-2001