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## PRODUCTION PROGRAM

### LENGTH-OF-STAIN COLORIMETRIC TUBES FOR SHORT-TERM ANALYSIS OF AIR CONTAMINANTS

Measurand	Catalogue No.	Reaction principle	Nominal range		# of strokes (x 100 cm <sup>3</sup> )	Conversion factors (at 20 °C, 101,3 kPa)	
			mg/m <sup>3</sup>	ppm		mg/m <sup>3</sup> in ppm	ppm in mg/m <sup>3</sup>
Acetic acid	AT 0211	pH indicator	5 - 80	2 - 30	10	0.40	2.50
Acetone - 200-A	AT 0311	Hydrazon + pH indicator	200 - 2500	80 - 1000	10	0.41	2.41
Alcohol ethyl (5 determinations.)	AT 1311	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	200 - 5000	100 - 2600	3	0.52	1.92
Alcohol n-butyl (5 determinations)	AT 1011	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	100 - 2000	33 - 660	5	0.33	3.08
Alcohol n-propyl (5 determinations)	AT 2411	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	100 - 1000	40 - 400	5	0.40	2.50
Benzene 20-A	AT 3311	Iodate + oleum (SO <sub>3</sub> )	20 - 1200	6 - 400	10	0.31	3.25
Butyl acetate	AT 3411	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	400 - 15000	100 - 3200	10	0.21	4.83
Carbon dioxide 0,1%	AT 4020	pH indicator	1830 - 45750	0,1 - 2,5 % v/v	5	0.55	1.83
Carbon dioxide 0,5%	AT 4012	pH indicator	9150 - 128100	0,5 - 7 % v/v	1		
Carbon dioxide 1%	AT 4024	pH indicator	18300 - 274500	1 - 15 % v/v	1		
Carbon disulphide 1-A	AT 2511	Iodate + oleum (non-specific)	2 - 500	0.5 - 160	10	0.32	3.16
Carbon monoxide 10-A	AT 3711	Iodate + oleum (SO <sub>3</sub> )	10 - 600	8.6 - 520	10	0.86	1.16
Carbon monoxide 200-B	AT 3722	Iodate + oleum (SO <sub>3</sub> )	200 - 5000	150 - 4300	1		
Chlorine 0,5 - A	AT 1111	Aromatic amine	1 - 25	0.5 - 10	10	0.34	2.95
Chlorine 5 - B	AT 1112	KBr+Fluoresceine	5 - 80	1 - 30	5		
Chlorine 10 - C	AT 1123	KBr+Fluoresceine	10 - 500	3 - 170	2		
Diethyl ether	AT 1411	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	150 - 2000	50 - 650	10	0.33	3.08

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Ethyl acetate	AT 4311	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	400 - 10000	100 - 2700	10	0.27	3.66
Ex-Test (Test for explosivity of gas mixtures)	TT 1751	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	350 - 9500	80 - 2000	3	0.21	4.75
Formic acid	AT 1611	pH indicator	5 - 60	2.5 - 30	10	0.52	1.91
Gasoline 100 (iodate basis) (As n-Octane)	AT 0821	Iodate + oleum (SO <sub>3</sub> )	100 - 3000 100 - 2000	20 - 630 20 - 400	3 5	0.21	4.75
Gasoline 300 (chromate basis) (As n-Octane)	AT 0811	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	300 - 4000	50 - 850	10		
<i>Gasoline hydrocarbons KW</i> (Multipurpose tube for the vapours of the pure substances)	AT 0831	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>					
Toluene			15 - 1500	4 - 400	10	0.26	3.83
o-Xylene			100 - 5500	23 - 1265	10	0.23	4.41
n-Hexane			30 - 2300	8 - 645	5	0.28	3.58
n-Heptane			280 - 5600	67 - 1345	1	0.24	4.16
n-Octane			50 - 9200	10 - 1930	3	0.21	4.75
Cyclohexane			150 - 4550	42 - 1275	3	0.28	3.52
n-Hexane	AT 4611	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	50 - 1500 100 - 2000	14 - 420 28 - 560	10 5	0.28	3.58
Hydrogen chloride 1-B	AT 1822	pH indicator	2 - 70 5 - 120	1.3 - 45 3.3 - 80	10 5	0.66	1.52
Mercury vapours	AT-LT 2111	CuJ complex	0.01 - 1.5	0.01 - 0.18	1-100	0.12	8.34
Mineral turpentine (White spirit-SKDN)	AT 4911	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	300 - 3500	-	10	-	-
n-Octane	AT 1711	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	50 - 10000	10 - 2100	3	0.21	4.75
Phenol 5-A	AT 2311		5 - 100 10 - 200	1 - 25 2 - 50	10 5	0.26	3.91
Propane-Butane (as a mix) (as n-Propane) (as n-Butane)	AT 5622	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	≈ 2000 - 24000 1830 - 22000 2420 - 29040	0.1 - 1.2 % v/v (or 1000 - 12000 ppm)	10	≈ 0.5 0.55 0.41	≈ 2.0 1.83 2.42
Sulphur dioxide 2-A	AT 2611	Zn nitroprousside	2 - 60 6 - 180	0.7 - 22 2.2 - 67	10 5	0.37	2.66

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Sulphur dioxide 10-B	AT 2612	pH indicator	10 - 150	4 - 60	10		
Sulphur dioxide 50-C	AT 2613	pH indicator	50 - 500	20 - 200	2		
Toluene 20-A	AT 2711	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	50 - 1500	13 - 400	10	0.26	3.83
Xylene 25-A (specific for xylene)	AT 3121	Oxydation with Ce(IV)	25 - 700	5 - 160	10	0.23	4.41
Xylene 50-B (all aromatics)	AT 3111	Cr(VI)→Cr(III) + H <sub>2</sub> SO <sub>4</sub>	50 - 1000	10 - 250	20	0.23	4.41

Piston type sampling pump "Hygitest", model BPP-2, 100 cm<sup>3</sup>, for colorimetric tubes



Bellows type sampling pump, 100 cm<sup>3</sup>, for colorimetric tubes

