



Inquiry test program

Company:

Contact:

E-Mail:

Phone:

Date:

N°	Name	Aerosol	d (nm)	C (cm ⁻³)	T _{ambient} (°C)	P _{ambient} (hPa)	rH _{ambient} (%)	Procedure	According to	Assessment
Example 1	Ambient temperature low	Aerosol type: CAST-soot Size distribution: polydisperse		6.6e3 5e4 1e5 5e5	5	950	50	DUT for 2 h at T Comparison with reference Measurement time 30 s	OIML D11 table 7	MPE ± 75 % min. 5e3 cm ⁻³
Example 2	Cut-off curve CPC	Aerosol type: CAST-soot Size distribution: monodisperse	10, 15, 23, 41, 55	>8e3 incl. Linearity @ 55 nm: 5e3, 8e3, 1e4, 1.5e4, 2e4	20	950	50		ISO 27891	

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		Aerosol type: Size distribution:								
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Aerosols

Type	Size distribution	Diameter d (nm)	Particle number concentration C (cm^{-3})
CAST-soot	<ul style="list-style-type: none">• Size selected monodisperse• Polydisperse (GSD < 1.6)	10...200	<ul style="list-style-type: none">• 5...4e4 (size depending)• 5...2e6 (size depending)
GFG-soot	<ul style="list-style-type: none">• Size selected monodisperse• Polydisperse (GSD < 1.8)	20...120	<ul style="list-style-type: none">• 5...4e4 (size depending)• 5...2e6 (size depending)
NaCl / KCl	<ul style="list-style-type: none">• Size selected monodisperse• Polydisperse (GSD < 2.5)	20...200	<ul style="list-style-type: none">• 5...4e4 (size depending)• 5...2e6 (size depending)
Emery-Oil	<ul style="list-style-type: none">• Size selected monodisperse• Polydisperse (GSD < 1.8)	10...200	<ul style="list-style-type: none">• 5...4e4 (size depending)• 5...2e6 (size depending)
Tetracontane	<ul style="list-style-type: none">• Size selected monodisperse• Polydisperse (GSD < 1.8)	30...50	<ul style="list-style-type: none">• 5...4e4 (size depending)• 5...2e6 (size depending)
PSL	<ul style="list-style-type: none">• Size selected monodisperse	20...1000	<ul style="list-style-type: none">• 5...2e4 (size depending)

Ambient conditions

Temperature T ($^{\circ}\text{C}$)	Pressure P (hPa)	Humidity rH (%)
-10...40	850...1050	7...95

Uncertainty

Typical expanded relative uncertainties of the counting efficiency: (3...7) %

Operation of device under test

During calibration all instruments are, in principle, operated by the personnel of the institute. The customer is therefore not obliged to be present during the calibration procedure. However, interested persons are very welcome to attend calibration.

Certification

ISO 17025: please check <https://www.metas.ch/metas/en/home/metas/internationale-anerkennung.html>

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