



Sampling protocol

Blank form

Supplementary item No 4



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Imprint

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Location:	Blank Form	Code No. XX
		Version: XX
Dust Laboratory	Sampling Protocol Measurement ENM	Page 4 of 10 pages

1 General

Research project:

Company:

Address/ phone / contact person

Period of investigation:

Measuring point/ working area:

Investigated technical processes

Number of participants/workers:

Categorisation of examined area:

Production

Handling and refining

Packaging and distribution

Activities referring to production of ENM/
while manufacturing ENM

Other processes – description:

2 Working area

Definition of working area:

spatial, organisational, activity-based

Exposure period at working area:

Area:

outdoor/ partly open/ closed

Room dimensions:

length/ wide/ height

3 Ventilation during measurement

Free ventilation:

windows/ doors/ ridge turret

Room ventilation:

supply and return air/ ceiling or floor area

Return of purified air:

amount of fresh air/ returned air

4 Climate conditions

Measurement area:

Temperature/ rel. humidity/ pressure

Outside:

Weather conditions / temperature/ wind

5 Work routine/ Procedure

Description of work routine/ activity:

Type/ purpose/ working method

Production plant:

Manufacturer/ type/ year of construction

6 Manufactured/ processed/ released materials

Designation:

Categorization of morphology of the material:

Granular particles

Platelet

Fibres

Categorization of chemical compound:

Carbon material

Metaloxide

Organic material

Metal

Other

Is a Material Safety Data Sheet available?

7 Relevant emission source at working or adjacent area/ timing of possible impact

Emission sources and respective time slot:

Nanoparticles while processing (manufacturing, decanting etc.)

Combustion processes (smoker/ open flame/furnace)

Traffic influence (diesel motor emissions, forklift etc.)

Further possible sources (motors, heat plates, heat radiators)

8 Emission reduction/ exhaust ventilation/ personal protective equipment

Measures against emission:

Wet machining/ closed system/ wetting

Exhaust ventilation (capture):

Effectiveness/ partly open/ closed

Wearing PPE:

when/ where/ how long

9 Remarks/ drawing/ photo

10 Measurement devices/ intern quality control

Comparative measurement in laboratory (at least 30 min) – sample number:

Comparative local measurement on-site (at least 30 min) – sample number:

Last calibration by producer:

Applied measurement instruments:

CPC 3007	(Condensations particle counter) Measurement range 10 to 1.000 nm Selected time resolution: Metrics	<input type="checkbox"/>
SMPS	(scanning mobility particle counter) Measurement range: Selected time resolution: Metrics	<input type="checkbox"/>
Aerosol spectrometer 1.109	(Laser scattering) Measurement range: Selected time resolution: Metrics	<input type="checkbox"/>

11 Measurement/ Parallel measurements (e.g. outdoor air)

Internal sample number: _____ **measurement date:** _____

Sampler: _____

Measurement from: _____ **until:** _____ **measuring time total:** _____

Remarks: _____

REM: **yes** **possibly** **just for safety reasons only**

Internal sample number: _____ **measurement date:** _____

Sampler: _____

Measurement from: _____ **until:** _____ **total measuring time:** _____

Remarks: _____

REM: **yes** **possibly** **just for safety reasons only**

Internal sample number: _____ **measurement date:** _____

Sampler: _____

Measurement from: _____ **to:** _____ **total measuring time:** _____

Remarks: _____

REM: **yes** **possibly** **just for safety reasons only**

Internal sample number:

measurement date:

Sampler:

Measurement from:

until:

measuring time total:

Remarks:

REM:

yes

possibly

just for safety reasons only

Internal sample number:

measurement date:

Sampler:

Measurement from:

until:

total measuring time:

Remarks:

REM:

yes

possibly

just for safety reasons only

Internal sample number:

measurement date:

Sampler:

Measurement from:

to:

total measuring time:

Remarks:

REM:

yes

possibly

just for safety reasons only