



## **Checklist** *Specifications and requirements* including exemplary description (please complete page 2)

Requirements	Details
Involved phases	e.g. liquid/liquid, liquid/solid, liquid/gas, gas/solid, liquid/gas/solid, etc
Target particles	e.g. bubbles, droplets, particles, cells, foam, foreign matter (multiple choices possible)
Dispersed phase volume fraction	e.g. 10 vol%, 100 ppmv, etc
Particle size range	e.g. 1- 1000 μm
Flow conditions and velocity	e.g. stirred tank, pipeline, free-fall, turbulent, laminar, 1 m/s
Measured variable	e.g. Sauter mean diameter, d <sub>v90</sub> , span, q <sub>0</sub> , q <sub>3</sub> , Q <sub>0</sub> , Q <sub>3</sub> , etc
Measurement frequency	e.g. once a day, every hour, every 10 minutes, every minute
Max. analysis time per measurement	Maximum time allowed analyzing one measurement point? When should the particle size distribution be available to user the latest?
Validation method	if applicable: e.g. comparison with own measurement, Laser diffraction, microscopy, manual measurements, etc?
Process control	e.g. link to process control system? Online-monitoring?
Control parameters	e.g. stirrer speed, temperature, pressure, volume flow rate, etc
Process conditions	e.g. temperature, pressure, pH, viscosity, ATEX, explosive atmosphere
Hazards	e.g. hazardous substances, specific safety requirements
Added value	e.g. control particles size distribution (product quality), reduce off- specification batches, reduce down-times, enhance product quality, etc.

## Completed by:

Date:





## **Checklist** Specifications and requirements

Requirements	Details
Involved phases	
Target particles	
Dispersed phase volume fraction	
Particle size range	
Flow conditions and velocity	
Measured variable	
Measurement frequency	
Max. analysis time per measurement	
Validation method	
Process control	
Control parameters	
Process conditions	
Hazards	
Added value	

## Completed by: \_\_\_\_\_

Date: