

# Hands on basic instructions

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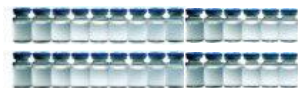


- Identify important parameters
- Recognize behavior of different particles
- It's hard to be an inspector even for half a day





- Test set contains 28 vials
- Blanks and rejects
- Every Inspector has to inspect all 28 vials in each experiment
- Patiently wait until the class is ready to move on to the next experiment



**PARTICLE INSPECTION DATA SHEET #1: Normal Inspection**

Inspector: \_\_\_\_\_ Test Set ID: \_\_\_\_\_

Inspection Station: \_\_\_\_\_ Illumination Intensity: \_\_\_\_\_ lux

FULL Illumination Intensity WITH Agitation 5 Sec/Background

Vial Number	<input checked="" type="checkbox"/>	
	Reject	Accept

- Write down your name on the data sheet
- Write down 3 digit number of the vial and your observation
- Write down Test set number
- Each inspector has to write down the inspection results for the entire set of 28 vials
- Write clearly



# Setup of the instrument



Switch on  
both lamps



Measure light  
intensity. Mark  
a position at ~  
3000 Lux



Mark a position  
at ~ 3000 Lux



- Remove cover from sensor
  - Select measurement range
- 
- Just listen to the metronome while inspecting to get the right timing



- Pick up vial holding at approximately a 30-degree angle and bring to the black and then the white background to inspect for any heavy particles on the lower portion of the vial bottom.
- Gently swirl to inspect for any fine sediment on the bottom of the vial in both backgrounds.
- Fully invert to fully 'wash' the stopper area, return upright, and swirl the vial in front of the black background looking for particulate matter.
- Fully invert, return upright, and swirl in front of the white background looking for particulate matter.
- Record results on data sheet.



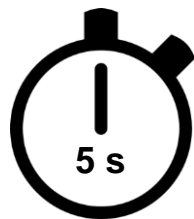
- Two vials of each set (marked with a dot) contain easy to observe particles
- Make yourself familiar with swirling and inverting for a couple of minutes with these vials to practice the particle detection
- Try swirling and inverting



# Exp. 1: Standard condition



Inspect at  
marked position



Inspection time  
5s black, 5 s  
white  
background



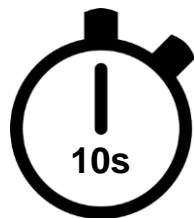
Swirl or  
invert



Record  
result



Inspect at  
marked position



Inspection time  
10s black, 10s  
white  
background



Swirl or  
invert



Record  
result



Switch off  
one lamp



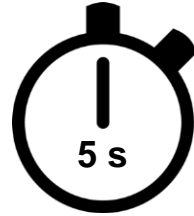
Measure light  
intensity



Mark a position  
at ~ 1500 Lux



Inspect at  
marked position



Inspection time  
5s black, 5 s  
white  
background



Swirl or  
invert



Record  
result



Inspect at  
marked position



Inspection time  
5s black, 5 s  
white  
background



No  
Swirling  
or  
inverting



Record  
result