

1. Application to:

All personnel working on the Homogenizer.

2. Pre-requisite for Operation of the Homogenizer:

2.1. Must have attended the operation and safety training.2.2. Must be fully understand the system risk assessment2.3. Must be fully qualified to operate the system by him/her self.

3. Hazards that may be present:

3.1. The system has no hazard accept for the noise when we turn on the system. That also can be avoided by closing the chamber door. The signage has been placed to remind user to close the chamber door before turn on the system.

4. Personal Protection Required:

4.1. Gloves

4.2. Cleanroom apparel (garment and shoes)

5. Procedures:

5.1. Operating of the Homogenizer

- 5.1.1. Before turn the system ON
 - 5.1.1a Make sure the probe is clean
 - 5.1.1b At room temperature condition
- 5.1.2. Turn ON the power
- 5.1.3. Set the parameter set control panel amplitude at 40%
- 5.1.4. Select recipe
- 5.1.5. Set the timing
- 5.1.6.Load / Unload samples

5.2 Maintenance of the Homogenizer

- 5.2.1 As and when the system is dirty or not working
- 5.2.2 The system must have valid licence

5.3 Specific Processes

5.3.1 Ultrasonic homogenizing is a mechanical process to reduce small particles in a liquid so that they become uniformly small and evenly distributed. For our process it is use to disperse the powder of the carbon nano-tube.

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SAFE WORK PROCEDURE:	Last Rev/Date	00	13 Apr 2010
Homogenizer	Current Rev/Date	00	13 Apr 2010
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6. Communication Frequency:

The Lab Supervisor shall arrange for this Safe Work Procedure to be communicated every once a year and as & when required.

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Approved by: <u>A/Prof Chor Eng Fong</u>