**Safe Job Analysis**

**Unit: Department of Chemistry/NAFUMA**

**Working tasks: Using drying Ovens/ sterilizers/incubators and SERIES TS8000.**

**Date: 11.11.10 Jayakumar Karthikeyan**

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| **Task** | **What can go wrong** | **Precautions** |
| **Taking goods from the hot oven.** | **The temperature of the goods you take out of the oven will have the oven temperature and will burn your fingures.** | **Use proper gloves which can withstand high temperature** |
| **Drying of toxic materials.** | **Which can affect others working inside the lab.** | **Clarified with equipment responsible prior to use and make a proper marking on the oven.** |
| **Solvothermal Works.** | **Possible undesired events associated with high pressure systems.** | **Be aware of SJA of solvothermal synthesis.** |
| **Heating Oven at high temperature.** | **Temperature may go higher than set point.** | **Make sure the safty thermostat is working properly.** |
| **Cleaning of Oven.** | **Electric shock may occurs upon contact with partS inside the oven .** | **Clean the oven only after power supply cord is disconnected from the mains.** |

**SOP**

**Safety Notice for Using of Drying Ovens**

**Contact equipment responsible prior to use (Jayakumar Karthikeyan)**

**Always wear personel protection equipments , lab glasses, gloves, lab coats, while operating the ovens. Make sure you are using gloves which can withstand high temperatures and gives protection to your arms.**

**1. Be aware the temperature of the hot air coming out of the exhaust may be upto 250-3000C, and that goods you take out of the oven will have the oven temperature.**

**2. Ovens should not be used in the atmosphere with a possible danger of flamable or explossive anesthetics.**

**3. Make sure the safty thermostat is working properly.**

**4. Goods are only to be put on the trays into ovens, never directly on the bottom of the oven.**

**5. Oven should not be used for heating liquids..**

**7. Flamable and explosive materials should not be put into ovens. The same applies for materials that may decompose/transform into flamable or explosive materials. Drying /heating of toxic materials must be clarified with equipment responsible and properly marked on the oven.**

 **8. While using oven for solvothermal process take all safty measures of using high pressure systems/autoclaves.**

 **9. All cleaning of the oven must be done while cold and when the power supply cord is disconnected from the mains.**