

 <p><b>BLDEA'S Shri Sanganabasava Mahaswamiji College of Pharmacy &amp; Research Centre Vijayapur 586103</b></p>	<b>DEPT:</b> PHARMACEUTICAL CHEMISTRY	<b>SOP NO.:</b> BCP/PC/SOP/005
	<b>INSTRUMENT:</b> MICROWAVE OVEN	<b>PAGE NO.:</b> 01-02
	<b>MAKE:</b> Raga's <b>MODEL:</b> RG 34L/RG43LIR <b>PROCURED ON:</b> 21-04-2016	<b>EFFECTIVE DATE:</b> 01/01/2022
	<b>SUBJECT:</b> SOP FOR MICROWAVE OVEN	<b>REVIEW PERIOD:</b> 31/12/2022

**Objective:**

The following document describes the standard operating procedure for Microwave Oven.

**Scope:**

Microwave oven is used for carrying out small scale reaction using microwaves at high temperature and pressure which facilitates reduction in reaction time.

**Procedure:**

1. Plug in to ensure the power supply.
2. Switch **ON** the main power supply and instrument mains.
3. Fill the reactant in the reaction vessel and keep in the microwave chamber.
4. Attach and fix the condenser above the reaction vessel.
5. Start the water supply to the condenser.
6. Close the door of the microwave.
7. Set the **WATT/ POWER** required for the reaction.
8. Set the **TIME** length required for the reaction.
9. Ensure that the digital display for the temperature, watt and visualization of reaction condition function properly.
10. Press the **START** button.

11. After set time the microwave will beep. Remove the reaction vessel from the chamber and stir with the help of glass rod for uniform mixing.
12. If required check the completion of the reaction by TLC. If the reaction is incomplete, keep back the reaction vessel in the chamber and follow the previous steps till the completion of the reaction.
13. After completion, **CUT OFF** the water supply and **SWITCH OFF** the power button for the instrument.

**Precaution:**

- Never put metal into a microwave.
- Containers placed in microwaves must have their tops/caps/closures.
- Check that the containers used will withstand heating. Some plastic or wax based containers melt at high temperature.
- Check that the item does not give off fumes or vapours when heated.
- Do not heat or dry any radioactive materials in the microwave.
- Check door seals and latches regularly for signs of wear and damage.
- Clean up any spillages; microwaves will go to the point of any dried matter.
- Microwaves used for laboratory work should never be used for heating food or drinks for human consumption.
- Inform safety personnel if any sparking occurs during heating.
- Safety checks should be made regularly.

	<b>PREPARED BY</b>	<b>CHECKED BY</b>	<b>APPROVED BY</b>
<b>NAME and DESIGNATION</b>	Ms.Hasti.Kenia Assistant professor	Dr. S.M.Metri Associate Professor	Dr.B.Shivakumar Professor & Head
<b>SIGNATURE &amp; DATE</b>			