

# USP 733 (U.S. Pharmacopoeia)

## Milestone Application Note for Ashing – High Throughput - Officials



### Summary

This procedure covers the determination of the Loss on Ignition (LOI) on pharmaceutical products according to United States Pharmacopoeia standards.



### Instrumentation

**Milestone PYRO** microwave system

**HighThroughput** muffle furnace

Crucibles (ceramic, metal, quartz, quartz fibre)

Analytical balance ( $\pm 0,0001\text{g}$ )

Disseccator

Spatula

### Sample amount

Sample weight	1- 5 g (according to individual substance monograph)
Total sample amount (max)	50 g

### Microwave program

Step	Time	#T1	Power	Vent.
1	00:25:00	#600°C	1800 W	*
2	00:45:00	#600°C	1800 W	*

# The ashing temperature must be set in accordance to what provided by the individual monograph of the substance.

### Procedure

1. Place a clean crucible on the balance plate, tare it and weigh the sample.
2. Place the crucible into the preheated furnace.
3. Remove the crucible from the furnace and cool it in dissector.
4. Place the crucible on the balance plate and take the weigh.
5. Calculate the ash residue.

### Notes

The crucible before use must be at constant weight. **All modifications to the present method must be agreed with Milestone Application Specialist.**

Subject to change without notice.  
For additional information please contact  
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### General precautions

Always use hand, eye and body protection when operating with the microwave system.

