

General ashing method for Pharmaceutical samples



Milestone Application Note for Ashing – Sulphate Ashing - Pharmaceutical

Summary

This method represents a guideline for the sulphate ashing of Pharmaceutical samples with the Milestone PYRO microwave muffle furnace. This procedure may need to be optimized to match your specific analytical goals.

Instrumentation

Milestone PYRO SA microwave system

Crucibles (quartz, ceramic, metal)

Analytical balance ($\pm 0,0001$ g)

Disseccator

Spatula



Sample amount

Sample weight	1-2 g (according to the expected ash content)
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Reagents

Reagent	1 mL of H ₂ SO ₄
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Procedure

1. Place a clean crucible on the balance plate, tare it and weigh the sample.
2. Add the reagent.
3. Place the crucible into the preheated furnace.
4. Remove the crucible from the furnace and cool it in dissector.
5. Place the crucible on the balance plate and take the weigh.
6. 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.

Microwave program

Step	Time	T1	Power	VAC
1	00:10:00	250°C	1000 W	X
2	00:40:00	250°C	1000 W	X
3	00:30:00	600°C	1800 W	X
4	00:30:00	600°C	1800 W	

General precautions

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

Subject to change without notice.
For additional information please contact
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