

# ASTM D5630 (Procedure A)

Milestone Application Note for Ashing – High Throughput - Officials



## Summary

This procedure covers the determination of the inorganic content of thermoplastic samples according to ASTM D5630 (Procedure A) method.

## Instrumentation

**Milestone PYRO** microwave system

**HighThroughput** muffle furnace

Large quartz crucibles or ceramic crucibles

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

Dissector

Spatula



## Sample amount

|                           |  |
|---------------------------|--|
| Sample weight             | 5-50 g (according to the expected ash content) |
| Nº of crucibles (max)     | 2  |
| Total sample amount (max) | 50 g   |

## Microwave program

| Step | Time     | #T1    | Power  | Vent. |
|------|----------|--------|--------|-------|
| 1    | 00:40:00 | #800°C | 1800 W | *     |
| 2    | 00:30:00 | #800°C | 1800 W | *     |

# The ashing temperature must be set in accordance to what provided by the official method for different thermoplastic types.

## 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.**

## General precautions

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

Subject to change without notice.  
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