

## Ash Determination

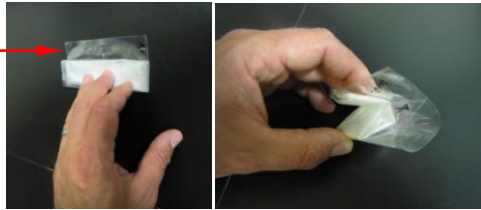
**IMPORTANT:** ANKOM Technology recommends that you use ceramic crucibles with fitted covers to avoid cross contamination or loss of ash. Fold the filter bags so that they easily fit into the crucibles.

### IDF

To determine the ash content within the IDF residue, follow the procedure below.

1. Starting at the bottom of the filter part of the bag, fold the bag upward, leaving at least 10 mm at the top of the clear polypropylene that is not folded. Then fold the bag in thirds from side to side.

10 mm of clear polypropylene



2. With your Heat Sealer set to “6” (setting may vary depending on heat sealer and power source), press the Heat Sealer arm down for 3 to 4 seconds to seal the clear polypropylene part of the bag just above the white filter material.



3. Label the folded, sealed filter bag and place it in a labeled ashing crucible.



4. Repeat steps 1 – 3 for all IDF bags to be ashed.
5. Place covered ashing crucibles with filter bags in a furnace at 600°C for 3 hours.
6. After the 3 hour furnace time, place the ashed crucibles in desiccator(s) and allow them to cool.
7. Remove cooled crucibles from the desiccator(s) and record their weights.

**SDF / TDF**

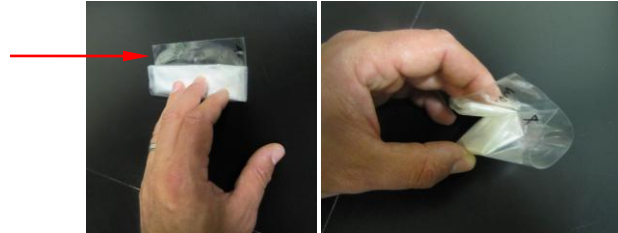
**NOTE:** During a TDF procedure there is no residue captured in the IDF *Flow-Thru* bag. Therefore, the ash procedure is only required for the SDF filter bag.

**NOTE:** Diatomaceous Earth (DE) used in the precipitation process can sometimes be difficult to fully rinse from the walls of the polypropylene bags. Therefore, ANKOM Technology recommends that the entire SDF bag be ashed.

To determine the ash content within the SDF / TDF residue, follow the procedure below.

1. Starting at the bottom of the filter part of the bag, fold the bag upward, leaving at least 10 mm at the top of the clear polypropylene that is not folded. Then fold the bag in thirds from side to side.

10 mm of clear polypropylene



2. Set your Heat Sealer to “6” (setting may vary depending on heat sealer and power source) and press the Heat Sealer arm down for 3 to 4 seconds to seal the unfolded polypropylene to the folded part of the bag.



3. Label the folded, sealed filter bag and place it in a labeled ashing crucible.



4. Repeat steps 1 – 3 for all SDF bags to be ashed.
5. Place covered ashing crucibles with filter bags in a furnace at 600°C for 3 hours.
6. After the 3 hour furnace time, place the ashed crucibles in desiccator(s) and allow them to cool.
7. Remove cooled crucibles from the desiccator(s) and record their weights.