



OUTGASSING TEST FOR PTM7000

November 28, 2023

Honeywell

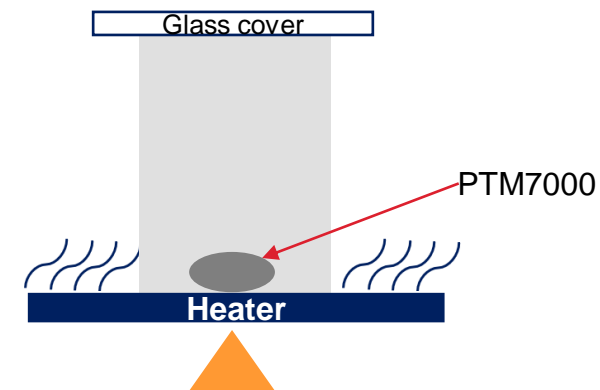
TEST DESCRIPTION FOR OUTGASSING

Test description

- Tools for test
 - ✓ Aluminum container
 - size: 55 x 55 x 85mm
 - thickness: 5 mm
 - ✓ Glass plate
 - size: 80 x 80 x 5 mm
 - ✓ Heater: Fisher Scientific
 - ✓ Thermal couple: Omega RDXL8
- Test items: weight loss
- Sample for test: PTM7000
- Baking time: 48 hrs
- Test temperature
 - 120°C
 - 160°C

Test procedure for compression

- a) Clean an aluminum container and bake it at 125°C oven for 1 hr
- b) Cool the container down to room temperature, weigh it and record
- c) Put PTM7000 in the aluminum container, weigh it and record
- d) Container is covered with a glass plate, then laid on the heater for 48 hrs.
- e) Cool the container down, weigh it and record.
- f) Check the status of glass cover, in order to check whether anything left on it



TEST RESULT FOR OUTGASSING

PTM7000 outgassing @120°C

PTM7000/120C	Before baking (g)	After 48 hrs baking (g)	Weight loss (g)	Comment
Empty Al container	274.559	/	/	/
Al container+PTM7000	313.722	313.715	/	/
PTM7000	39.163	39.156	-0.007	Weight loss ratio: - 0.018%
Glass cover	74.655	74.656	0.001	- No oil was observed on the glass. - Substance was found when using black plastic as cover

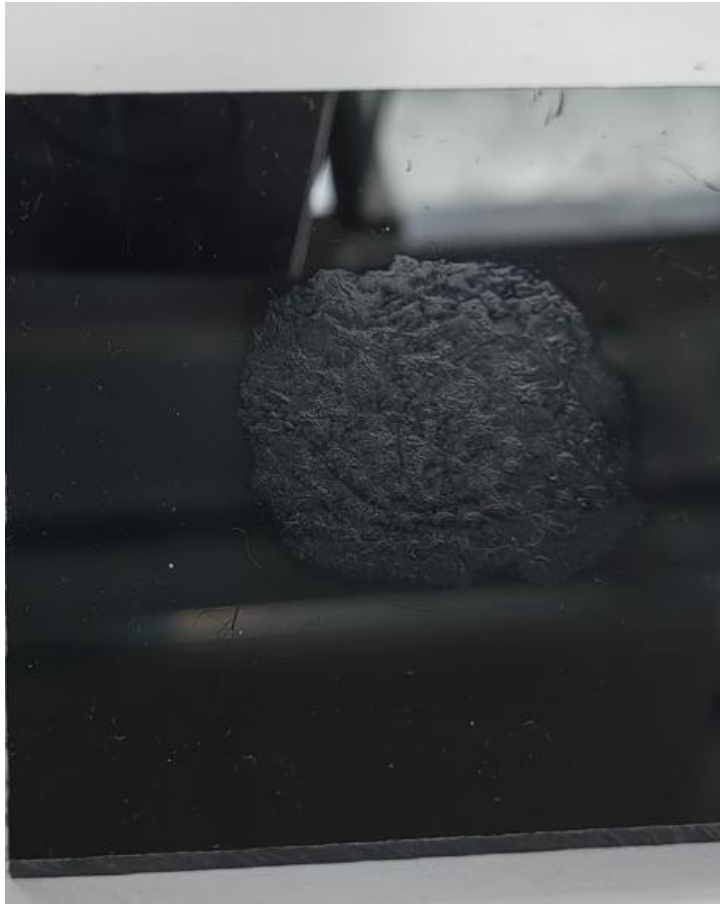
PTM7000 outgassing @160°C

PTM7000/160C	Before baking (g)	After 48 hrs baking (g)	Weight loss (g)	Comment
Empty Al container	274.683	/	/	/
Al container+PTM7000	315.032	315.02	/	/
PTM7000	40.349	40.337	-0.012	Weight loss ratio 0.030%
Glass cover	74.665	74.666	0.001	- No oil was observed on the glass. - Substance was found when using black plastic as cover



Tools for testing

FIGURES OF TEST RESULT FOR OUTGASSING



Substance was found on black surface



No oil was observed on glass

Summary

- When using glass as cover, no obvious contamination was observed.
- When using black plastic as cover, it could be observed from a specific view that substance was left on the surface of cover.

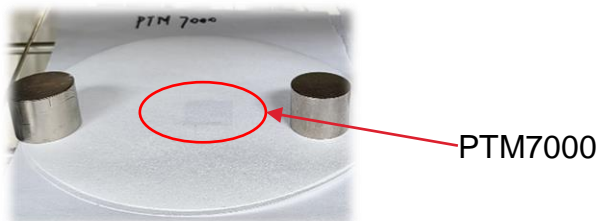
TEST FOR OIL BLEEDING

Test description

- Baking time: 72hrs
- Tools for test
 - ✓ Filter paper
 - Size of PTM7000
 - 20 x 20 x 0.25 mm
 - ✓ Oven

Test procedure

- Put PTM7000 on top of filter paper
- PTM7000 was covered with another piece of filter paper to make a specimen (as figure below)
- Put the specimen into oven (125°C)
- Baked it for 72 hrs
- Take the specimen out and check the size of oil ring



Test result

- Diameter of oil ring: 2mm

