

OUTGASSING TEST FOR PTM7900

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: PTM7900

Baking time: 48 hrs

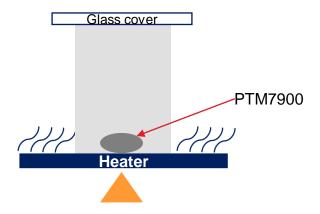
Test temperature

- 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
- Put PTM7900 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 to confirm whether anything left on it



TEST RESULT FOR OUTGASSING

PTM7900 outgassing @120°C

	Before	After 48 hrs		
PTM7900/120C	baking (g)	baking (g)	Weight loss (g)	Comment
Empty Al container	274.273	/	/	/
Al container+PTM7900	314.617	314.614	/	/
PTM7900	40.344	40.341	-0.003	Weight loss ratio: -0.007%
				- No oil was observed on the glass.
				- Substance was found when using black plastic
Glass cover	74.743	74.745	0.002	as cover



PTM7900 outgassing @160°C

PTM7900/ 160C	Before baking (g)	After 48 hrs baking (g)	Weight loss (g)	Comment
Empty Al container	274.67	/	/	/
Al container +PTM7900	316.639	316.63	/	/
PTM7000	41.969	41.96	-0.009	Weight loss ratio 0.021%
Glass cover	74.96	74.96		No oil was observed on the glass.Substance was found when using black plastic as cover

FIGURES OF TEST RESULT FOR OUTGASSING





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.

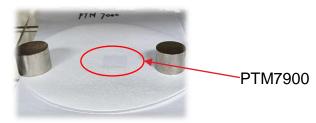
TEST FOR OIL BLEEDING

Test description

- Baking time: 72hrs
- Size of PTM7900: 20 x 20 x 0.25 mm
- Tools for test
 - ✓ Filter paper
 - ✓ Oven

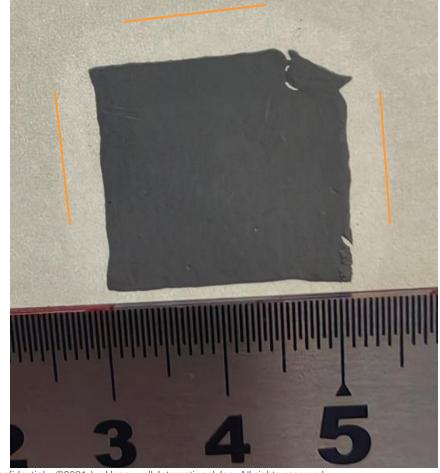
Test procedure

- a) Put PTM7900 on top of filter paper
- b) PTM7900 was covered with another piece of filter paper to make a specimen (as figure below)
- c) Put the specimen into oven (125°C)
- d) Baked it for 72 hrs
- e) Take the specimen out and check the size of oil ring



Test result

Diameter of oil ring: 3.5mm



Honeywell Confidential - ©2021 by Honeywell International Inc. All rights reserved.