

Sheet1

Insturments are a radio sharck IT thermometer (about 15 yes old in 2017 & a Southwire Multimeter (\$50 unit) that accepts a "K-type" thermocouple that was included in the meter. Both give wide varieties of readings for some reason...

*Note – on Hour 2 reading on the Aluminum thermous – the reading temp was HIGHER than start by .5 deg @ 122 which seems strange – could be due to bad initial temp reading – inaccurate – it was changed to 121.5 for easier readings

Stainless Steel thermos – Cheap – no/little vacuum

Time	IR thermometer Reading Deg F	Heat remaining % remaining	Loss % from prev 2 hours	K-type Thermocouple Reading Deg F	Heat remaining % remaining	Loss % from prev 2 hours
0 mins	122	100.00%		130	100.00%	
2 Hours	107.5	88.115%		106.5	81.923%	
4 Hours	93	76.230%		94.3	72.538%	
6 Hours						
8 hours						
10 hours						
12 hours						
14 hours						
16 hours						
18 hours						
20 hours						
22 hours						
24 hours						

Aluminum w/ mirrored glass inside, ORIGINAL Thermos Brand w/ Cork stopper at top of unit!!!

Time	IR thermometer Reading Deg F	Heat remaining % remaining	Loss % from prev 2 hours	K-type Thermocouple Reading Deg F	Heat remaining % remaining	Loss % from prev 2 hours
0 mins	121.5	100.000%		129.3	100.00%	
2 Hours	121.5	100.00%		124.9	96.597%	
4 Hours	121.5	100.000%		124.8	96.520%	
6 Hours						
8 hours						
10 hours						
12 hours						
14 hours						
16 hours						
18 hours						
20 hours						
22 hours						
24 hours						

Plastic w/ mirrored glass inside – From Black & Decker coffee maker – filled making coffee

Time	IR thermometer Reading Deg F	Heat remaining % remaining	Loss % from prev 2 hours	K-type Thermocouple Reading Deg F	Heat remaining % remaining	Loss % from prev 2 hours
0 mins	120.5	100.00%		127.5	100.00%	
2 Hours	116.5	96.680%		122.3	95.922%	
4 Hours	112	92.946%		118.2	92.706%	
6 Hours						

8 hours
10 hours
12 hours
14 hours
16 hours
18 hours
20 hours
22 hours
24 hours