


## Material Declaration for P19-4021

Product Information	
Part Number:	P19-4021
Part Description:	ATE Spring Probe
Part Weight (g):	0.0858

Process Data	
Peak Reflow (Deg. C)	260°C for 10 seconds
Termination Finish	Gold over Nickel
RoHS Compliant? (Y/N)	Yes

Homogeneous Material Location	Weight (g)	Tolerance	Substance Name	CAS #
Probe Barrel/Body - Brass	0.0225	4%	Copper	7440-50-8
	0.0069	4%	Zinc	7440-66-6
	0	0.0006g max	Iron (impurity only)	7439-89-6
	0	0.000003g max	Lead (impurity only)	7439-92-1
Probe Barrel/Body - Plating	0.00107	10%	Nickel	7440-02-0
	0.000077	20%	Gold	7440-57-5
Probe Head/Plunger - Beryllium Copper	0.0488	3%	Copper	7440-50-8
	0.0006	0.30%	Beryllium	7440-41-7
	0.0002	0.10%	Lead	7439-92-1
	0	0.0001g max	Cobalt (impurity only)	7440-48-4
	0	0.0004g max	Nickel (impurity only)	7440-02-0
	0.000773	10%	Nickel	7440-02-0
Probe Head/Plunger - Plating	0.000019	20%	Gold	7440-57-5
Probe Spring - Stainless Steel	0.00343	5%	Iron	7439-89-6
	0.00044	3%	Nickel	7440-02-0
	0.00095	2%	Chromium (Metallic)	7440-47-3
	0	0.000004g max	Carbon (impurity only)	7440-44-0
	0	0.00004g max	Silicon (impurity only)	7440-21-3
	0	0.000075g max	Manganese (impurity only)	7439-96-5
	0	0.000002g max	Phosphorus (impurity only)	7723-14-0
	0	0.000001g max	Sulphur (impurity only)	7704-34-9

Prepared by: 

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On behalf of:

**HARWIN**