

13. Noble Metals

Blocks/Discs

13.1.1 High Purity Gold	All Elements ppm															
	Au	Ag	Cu	Zn	Pb	Sb	Bi	Se	Pt	Pd	Rh	Fe	Mn	Co	Cr	As
131 SI RAuHP1	99.99(5)	6	3	3	2	1	<1	<2	<2	<2	<1	2	2	<1	<2	<2
131 SI RAuHP2	99.99	20	10	10	6	3	2	6	6	6	2	6	6	2	5	6
131 SI RAuHP3	99.9(7)	60	30	30	20	10	5	20	20	20	5	20	20	5	15	20

Certified values will be supplied for Ag and all impurities present - the above values are only examples of typical impurity levels. Other impurities may be present and, where possible, will be reported.

13.1.2 Refined Gold	All Elements ppm															
	Ag	Cu	Zn	Pb	Sb	Bi	Se	Pt	Pd	Rh	Fe	Mn	Co	Cr	Ti	
131 SI RAuP1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
131 SI RAuP2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
131 SI RAuP3	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
131 SI RAuP4	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
131 SI RAuP5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
131 SI RAuP6	150	150	150	159	150	150	150	150	150	150	150	150	150	150	150	
131 SI RAuP7	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	

The impurity concentrations will be certified and will fall within 20% of the specified values. Products can be prepared to customers' own specifications.

13.1.3 Au/Ag/Cu Jewellery alloys	%		
	Au	Ag	Cu
131 SI RAuA1	98.0	2.0	...
131 SI RAuA2	96.0	2.0	2.0
131 SI RAuA3	91.5	...	8.5
131 SI RAuA4	88.0	8.0	4.0
131 SI RAuA5	75.0	18.0	7.0
131 SI RAuA6	50.0	20.0	30.0
131 SI RAuA7	37.0	10.0	53.0

The concentrations of major elements Au, Ag and Cu in each alloy will fall within 1% of the values specified. Minor elements are present within the range 1 - 150 ppm. Please specify if values for these are required. Products can be prepared to customers' own specifications.

13.2.1 High purity Silver	All Elements ppm															
	Ag	Au	Cu	Zn	Pb	Sb	Bi	Cd	Pt	Pd	Rh	Fe	Mn	Co	Cr	Ti
133 SI RAgHP1	99.99(5)+	10	10	5	5	5	1	1	2	1	1	5	2	2	1	1
133 SI RAgHP2	99.99	30	30	15	15	15	3	3	6	3	3	15	6	6	3	3

Certified values will be supplied for Ag and all impurities present - the above values are only examples of typical impurity levels. Other impurities may be present and, where possible, will be reported.

13.2.2 Refined Silver	All Elements ppm													
	Au	Rh	Pd	Pt	Te	Sn	Pb	Sb	Bi	Zn	Cu	Fe	Ni	
133 SI RAgP1	5	5	5	5	5	5	5	5	5	5	5	5	5	
133 SI RAgP2	10	10	10	10	10	10	10	10	10	10	10	10	10	
133 SI RAgP3	25	25	25	25	25	25	25	25	25	25	25	25	25	
133 SI RAgP4	50	50	50	50	50	50	50	50	50	50	50	50	50	
133 SI RAgP5	100	100	100	100	100	100	100	100	100	100	100	100	100	
133 SI RAgP6	150	150	150	159	150	150	150	150	150	150	150	150	150	
133 SI RAgP7	200	200	200	200	200	200	200	200	200	200	200	200	200	

The impurity concentrations will be certified and will fall within 20% of the specified values. Products can be prepared to customers' own specifications.

13.2.3 Ag/Cu Alloys	%	
	Ag	Cu
133 SI RAgA1	97.0	3.0
133 SI RAgA2	94.0	6.0
133 SI RAgA3	91.5	8.5
133 SI RAgA4	80.0	20.0
133 SI RAgA5	60.0	40.0

The concentrations of major elements Ag and Cu in each alloy will fall within 1% of the values specified. Minor elements are present within the range 1 - 150 ppm - please specify if values for these are required. Products can be prepared to customers' own specifications.

13.3.1 Ternary / Jewellery Alloys	%			All Elements ppm									
	Au	Ag	Cu	Bi	Fe	Mn	Ni	Pb	Pd	Pt	Sb	Sn	Zn
135 SI RTA1	98.0	1.5	0.5										
135 SI RTA2	96.0	3.0	1.0										
135 SI RTA3	95.0	2.5	2.5										
135 SI RTA4	93.0	4.5	2.5										
135 SI RTA5	90.0	4.0	6.0										
135 SI RTA6	83.3	4.0	12.7										
135 SI RTA7	81.7	7.2	11.1										
135 SI RTA8	80.0	12.5	7.5										
135 SI RTA9	58.3	8.0	33.7										
135 SI RTA10	58.3	20.0	21.7										
135 SI RTA11	58.3	30.0	11.7										
135 SI RTA12	50.0	20.0	30.0										
135 SI RTA13	37.5	2.0	60.5										
135 SI RTA14	37.5	10.0	52.5										
135 SI RTA15	37.5	16.0	46.5										

The concentrations of major elements Au, Ag and Cu in each alloy will fall within 1% of the values specified. Minor elements are all present within the range 1 - 150 ppm, and all will be certified. Products can be prepared to customers' own specifications.

13.4.1 High Purity Precious metals	%		%	
	Pt	Pd	Pt	Pd
Platinum:	99.99+	traces	Palladium:	traces 99.99+
Rhodium:	Powder standards. Please enquire for details.		Ruthenium:	traces 99.99+ Trace impurities present in the range 1 to 50 ug/g will be given. Powder standards. Please enquire for details.

13.4.2 Precious Metal Calibration Standards
A range of standards for calibration purposes can be prepared. Please enquire

Note: Sizes & Shapes for all the above precious metals.
The sizes and shapes depend on the analytical method to be used. Generally the following are available
XRF Spectrometry: 24 mm Dia. x 4mm discs mounted in 31 mm Dia. Bakelite TSP.
ICP, AAS, others solution methods: Globules 200mg +/- 5mg each, quantity will determine unit size
OES spark (time resolved): 25mm dia. discs with minimum thickness 4mm
OES DC Arc: globules as above. **Other forms:** wire, rods, plate (+1mm)