LEAD Pure

ELEMENT	COMPOSITION		
Lead (Pb)	99.98 +	99.98	99.97
Impurities			
Calcium (Ca)	<0.0005	0.0010 Max	0.0010 Max
Tin (Sn)	<0.0010	0.0010 Max	0.0010 Max
Copper (Cu)	<0.0010	0.0010 Max	0.0020 Max
Antimony (Sb)	<0.0010	0.0010 Max	0.0010 Max
Arsenic (As)	<0.0005	0.0010 Max	0.0010 Max
Bismuth (Bi)	<0.0150	0.0150 Max	0.0300 Max
Iron (Fe)	<0.0010	0.0010Max	0.0010Max
Nickel (Ni)	<0.0005	0.0010 Max	0.0010 Max
Silver (Ag)	<0.0040	0.0035 Max	0.0050 Max
Sulphur (S)	<0.0005	0.0010 Max	0.0010 Max
Zinc (Zn)	<0.0010	0.0010 Max	0.0010 Max
Cadmium (Cd)	<0.0005	0.0010 Max	0.0010 Max
Aluminum (Al)	<0.0010	0.0010 Max	0.0010 Max
Other Impurities	0.0150 Max	0.0200 Max	0.0300 Max

LEAD Antimony Alloys

ELEMENT	1.70%	2.75%	3.20%	4.50%
Antimony (Sb)	1.7% (+/- 0.10)	2.55-2.95	3.2%(+/-0.20)	4.3-4.7
Arsenic (As)	0.15% (+0.05-0.02)	0.12-0.16	0.12%(+/-0.02)	0.06-0.12
Tin (Sn)	0.20%(+0.05-0.02)	0.20-0.25	0.20%(+0.03-0.02)	0.08-0.15
Selenium (Se)	0.18%(+0.05-0.02)	0.02-0.026	0.025%(+/-0.005)	max 0.01
Bismuth (Bi)	max 0.050	0.03-0.05	0.03%(+/-0.001)	0.03-0.05
Copper (Cu)	max 0.020	max 0.03	max 0.050	max 0.03
Silver (Ag)	max 0.010	max 0.01	max 0.010	max 0.008
Tellurium (Te)	max 0.0025	max 0.01	max 0.0015	max0.01
Iron (Fe)	max 0.002	max 0.001	max 0.0015	max0.005
Sulpher (S)	max 0.002		max 0.005	0.004-0.009
Barium (Ba)	max 0.001		max 0.001	
Chromium (Cr)	max 0.001		max 0.001	
Cobalt (Co)	max 0.001		max 0.003	
Nickel (Ni)	max 0.0015	max 0.005	max 0.0015	max 0.005
Zinc (Zn)	max 0.001	max 0.0005	max 0.001	max 0.001
		max	max 0.001	max 0.0005
Lead (Pb)	Balance	Balance	Balance	Balance

LEAD Calcium Alloys

ELEMENT	SPECIFICATION LIMIT%
Calcium (Ca)	0.10 - 0.11 %
Tin(Sn)	0.30 - 0.50%
Aluminum (Al)	0.01 - 0.04%
Silver (Ag)	0.015 % max
Arsenic (As)	0.001 % max
Bismuth (Bi)	0.025% max
Zinc (Zn)	0.001% max
Iron (Fe)	0.005% max
Copper (Cu)	0.001% max
Lead (Pb)	Balance

ELEMENT	SPECIFICATION LIMIT%
Calcium (Ca)	0.07% - 0.095%
Tin(Sn)	0.3% -0.4%
Aluminum (Al)	0.01 - 0.015 %
Arsenic (As)	0.001% Max
Bismuth (Bi)	0.001% Max
Zinc (Zn)	0.0015% Max
Iron (Fe)	0.001% Max
Copper (Cu)	0.001% Max
Lead (Pb)	Balance
Positive Tin	

ELEMENT	SPECIFICATION LIMIT%
Calcium (Ca)	0.12 - 0.14%
Tin(Sn)	0.20 - 0.28 %
Aluminum (Al)	0.01 - 0.0015%
Anitmony (Sb)	0.001% max
Arsenic (As)	0.001% max
Bismuth (Bi)	0.015% max
Selenium (Se)	0.001% max
Iron (Fe)	0.001% max
Silver (Ag)	0.0025% max
Copper (Cu)	0.001% max
Zinc (Zn)	0.001% max
Lead (Pb)	Balance
Negative Tin	

LEAD Tin Master Alloys

ELEMENT	SPECIFICATION LIMIT%
Tin (Sn)	1.6% - 1.8%
Silver (Ag)	0.00.%
Antimony (Sb)	0.001% Max
Arsenic (As)	0.001% Max
Bismuth (Bi)	0.015%Max
Iron (Fe)	0.001%Max
Zinc (Zn)	0.001%Max
Lead (Pb)	Balance

LEAD E & 1/2E Alloys

ELEMENT	SPECIFICATION LIMIT%	SPECIFICATION LIMIT%	SPECIFICATION LIMIT%
Tin (Sn)	0.15 & 0.25	0.35 & 0.45	0.25 & 0.35
Antimony (Sb)	0.05 & 0.15	0.15 & 0.25	0.15 & 0.25
Bismuth (Bi)	max 0.02	max 0.03	max 0.03
Cadmium (Cd)	max 0.001	max 0.001	max 0.001
Tellurium (Te)	max 0.005	max 0.002	max 0.002
Arsenic (As)	max 0.001	max 0.001	max 0.001
Copper (Cu)	max 0.05	max 0.003	max 0.003
Silver (Ag)	max 0.003	max 0.005	max 0.005
Zinc (Zn)	max 0.001	max 0.0005	max 0.0005
Nickel (Ni)	max 0.001	max 0.001	max 0.001
Lead (Pb)	By Difference (99.5)	Balance	Balance