

Arsenic-MBE-Application

Our arsenic ingots for MBE application are designed to work with common MBE-equipment.

Diameter [mm]	Length [mm]	Weight [g] – appr.
15-18	88	95
15-20	135	180
18-22	88	140
20	100	175
32	100	450
31	140	700
40	66	465
40	132	930
44	120	1023
50	100	1090
65	55	1010
65	60	1115
65	70	1290
65	127	2230
65	130	2300
65	135	2500
65	146	2710
80	100	3350
100	120	5225
100	123	5250
110	105	5200
110	175	9300

Other dimensions are available upon request!

Ultra High Purity Arsenic for MBE-Application

PPM Pure Metals GmbH, based in Germany, is a producer of High Purity Arsenic for more than 30 years. All relevant players in the world market of Gallium Arsenide based materials for electronic and optoelectronic applications know PPM Pure Metals as a reliable supplier of high quality materials. Modern equipment and processes, strict quality control and highly educated experienced employees guarantee best quality, short delivery times and flexible reactions to special customer requests.

Arsenic shaped ingots

Diameter: up to 110 mm

Length: up to 175 mm

Weight: up to 9.5 kg

Quality: 7N5

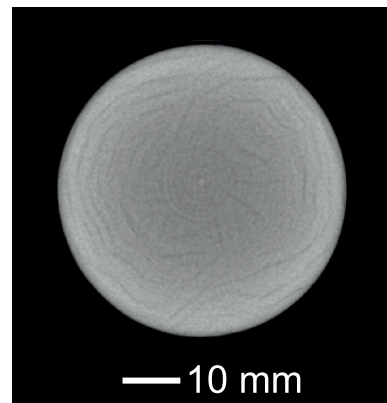
Density: $5.72 \frac{g}{cm^3} - 0.23 \frac{g}{cm^3}$



Example: Cylinder 65 mm x 135 mm



LINAC-CT x-ray



LINAC-CT x-ray

For MBE-Application PPM Pure Metals produces massive Arsenic ingots with different shapes up to 9.5 kg net weight. A sophisticated many step process ensures very low levels of chemical impurities and low levels of Oxygen and other gases. LINAC-CT x-ray measurements show no hints of gas containing cavities. Crystal grains within the blocks have a length of many centimeters. Massive Arsenic ingots help users of MBE-machines to optimize crucible filling degree and thereby increase availability of expensive MB Equipment.

The material is packed in special vacuum bags. Inner bag multilayer PE/PP, outer bag multilayer with diffusion barrier layer to protect the material from oxidation. PPM Pure Metals recommends not to exceed a storage time of 4 months.

PPM Pure Metals possesses a bright variety of in house analytical possibilities. Besides standard techniques like ICP-OES, AAS and classical wet chemical analysis under clean room conditions, we operate a VG9000 GDMS-System.

This is the generally accepted standard method to judge quality of high purity metals.

Typical GDMS-Analysis

Element	ppm _a	Element	ppm _a
Li	< 0.005	Zn	< 0.001
Be	< 0.004	Ga	< 0.0005
B	< 0.007	Ge	< 0.005
Na	< 0.002	Se	< 0.005
Mg	< 0.002	Mo	< 0.004
Al	< 0.003	Ag	< 0.007
Si	0.02	Cd	< 0.003
P	< 0.001	Sn	< 0.003
S	< 0.001	Sb	< 0.003
K	< 0.019	Te	< 0.003
Ca	< 0.001	W	< 0.002
V	< 0.001	Hg	< 0.002
Cr	< 0.001	Tl	< 0.0004
Mn	< 0.001	Pb	< 0.0004
Fe	0.01	Bi	< 0.0004
Ni	< 0.001	Th	< 0.0003
Co	< 0.001	U	< 0.0003
Cu	< 0.004		

Please consider that these values are based on experiences with past production lots. They do not represent guaranteed maximum values for future lots. For detailed questions and technical advise please feel free to contact our experienced material experts.

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