

Platinum Labware



STAR LABS

Where Science Meets Service

Platinum Crucibles

About Us

GLOBAL INVENTORY

Many standard crucibles and dishes are available from stock. The majority of our chemicals and other materials are available in research and development quantities from stock. We also supply most products from stock in semi-bulk or bulk quantities. Many are in regular production and are available in bulk for next day shipment. Our experience in manufacturing, sourcing and handling a wide range of products enables us to respond quickly and efficiently to your needs.



CUSTOM SYNTHESIS

We offer flexible custom manufacturing services with the assurance of quality and confidentiality. We can deliver the chemical you need in sizes for research, pilot-scale and full-scale production applications.



CUSTOMER SERVICE

Our dedicated scientific and commercial teams offer full service from production to delivery. Most products are stocked in catalog pack sizes and the majority are available from stock in semi-bulk and bulk quantities as well. All specialty and bulk products are shipped with a batch specific certificate of analysis and material safety data sheet. Because we understand that specific packaging is often important, we offer custom packaging and labeling to meet your requirements.



QUALITY CONTROL

We employ advanced quality control for both in-process and final product testing phases. The high standard of our modern quality control and assurance facilities is matched by the expertise of our experienced staff.

Abbreviations and Codes

The following abbreviations are used throughout our listing of products.

Å	Angstrom	N	Normality of solution
AAS	Atomic absorption spectrometry	n_D^{20}	Refractive index for the sodium D line at 20 °C (or temperature indicated)
ACS	Chemicals meeting the specifications outlined by the American Chemical Society	nm	Nanometer
AES	Atomic emission spectrometry	NEW!	New product
APS	Average particle size	NMR	Nuclear magnetic resonance
anhy	Anhydrous	OD	Outer diameter
approx.	Approximately	oz	Ounce
aq.	Aqueous	optical gr.	Suitable for optical applications
Atm	Atmospheres	pc(s)	Piece(s)
b.p.	Boiling point in °C at 760mm pressure, unless otherwise specified	pH	Value taken to represent the acidity or alkalinity of an aqueous solution
(c)	Contained weight of active material	POR	Price on request
°C	Celsius	ppb	Parts per billion
ca	Circa	ppm	Parts per million
cc	Cubic centimeter	prec.	Precipitated
cm	Centimeter	Primary Standard	Analytical reagent of exceptional purity, for standardizing volumetric solutions and preparing reference standards
cont.	Contained	P.T.	Passes test
cP	Centipoise	PTFE	Poly(tetrafluoroethylene)
cS	Centistoke	Purified	A grade of higher quality than technical, often used where there are no official standards
d.	Density	P.V.	Pore volume
dec.	Decomposes	Reagent	Reagent grade
dia.	Diameter	REM	Rare earth metal
ea.	Each	(REO)	Rare earth oxide base - content of specific rare earth element in comparison to total rare earths present
ee	Enantiomeric excess	S.A.	Surface area
eV	Electron volt	soln.	Solution
°F	Fahrenheit	Sp.Gr.	Specific gravity
f.p.	Flash point	Sp.Rot.	Specific rotation
FSSS	Fisher sub-sieve sizer	stab.	Stabilized
F.W.	Formula weight	subl.	Sublimes
g	Gram	Tc	Critical temperature
g/l	Grams per liter (gas density)	tech.	Technical grade
GC	Gas chromatography	TLC	Thin-layer chromatography
GLC	Suitable for use in gas liquid chromatography	TSCA	Toxic Substance Control Act
HPLC	High-performance liquid chromatography	UN	Hazardous material transportation identification number
ICP	Inductively Coupled Plasma	λ	Wavelength in nanometers
ID	Inner diameter	wt	Weight
in	Inch	w/w	Weight/weight
incl	Includes	w/v	Weight/volume
IR	Infrared	XRD	X-ray diffraction
J/mol·K	Joule(s) per mole Kelvin	△	Air sensitive
kg	Kilogram	▣	Moisture sensitive
L or l	Liter	■	Hygroscopic
lb	Pound	▲	Light sensitive
μ	Micro	≈	Approximately
μg	Microgram	>	Greater than
μm	Micrometer (micron)	≥	Greater than or equal to
m	Meter	<	Less than
M	Molarity of solution	≤	Less than or equal to
max	Maximum	[]	Numbers in brackets after the chemical description indicate the Chemical Abstract Service Registry Number
meq	Milliequivalent	- mesh #	90% particles pass through screen having a given mesh size
Merck	The Merck Index	+ mesh #	90% particles are retained by a screen having a given mesh size
mg	Milligram	t	Denotes substance is listed in Toxic Substance Control Act (TSCA) inventory
micron	Micrometer		
min.	Minimum		
ml	Milliliter		
mm	Millimeter		
mmol	Millimole		
Mn	Number averaged molecular weight		
mol	Mole		
m.p.	Melting point		
M.W.	Molecular weight		
Mw	Weighted averaged molecular weight		
Mw/Mn	Monodispersity value		
(N)	Nematic phase of a liquid crystal		

Your Choice of Materials



Only a few metals are required to produce a wide array of durable labware. The basic noble metals group consists of platinum, rhodium, ruthenium, osmium, palladium, iridium, gold and silver. Ruthenium and osmium, however, are unworkable in their pure form, and are only offered under special circumstances. The following page contains information on the most common metals and alloy combinations for labware.

Platinum

Pure platinum has excellent resistance to chemical attack by acids and fusion mixtures. Our platinum labware contains 99.8% pure platinum, plus small amounts of iridium and rhodium for added strength and durability.

Platinum-Rhodium

When physical conditions require high labware strength at all temperatures, a platinum 10% rhodium alloy offers superior performance to pure platinum. It is not recommended for applications that involve repeated fusions, since it is slightly more susceptible to chemical attack than pure platinum.*

*Rhodium oxides may form which could volatilize off causing weight loss and a weakened material.

Crucibles



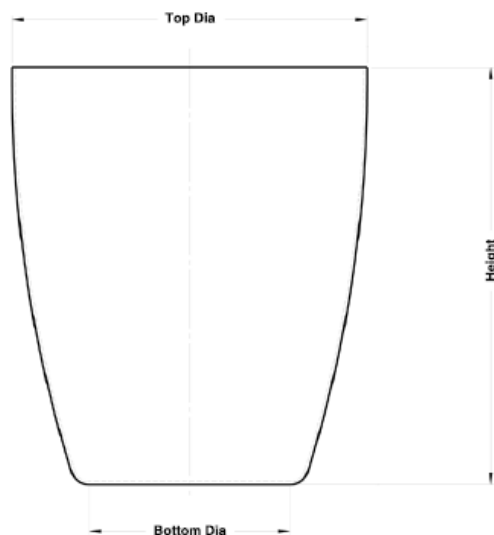
All crucibles are designed to withstand hard and varied use. Reinforced tops and bottoms can be supplied for added strength without adversely affecting capacity or fit of the cover. Non-standard crucible sizes and lids are available upon request.

Most crucibles are constructed of platinum, but customers may also request specially manufactured crucibles made from our list of alloys.

Contact us for custom fabrication

Standard Form Crucibles

Stock No.	Capacity (ml)	Top Dia Outer (mm)	Bottom Dia (mm)	Height (mm)	Std Weight (gm)
46916	5	20	12	23	7
46377	7	23	14	27	9
46751	10	26	15.5	29	8.5
46896	10	29	17.5	24	8
46800	10	26	17	30	11
46825	15	29	17.5	33	11.5
46371	15	32	19.5	27	13
46974	15	28	18	32	16
46520	20	32.5	18	36	18
46498	20	37	22.5	31	17
46484	20	30	19	35	19
46578	25	41	25	34	25
46870	25	35	21	39	19
46375	25	35	23	37	23
46813	30	37.5	22.5	41	24
46343	30	35	23	40	28
46477	35	43.5	26.5	36	26
46649	35	39	23.5	43	32
46911	40	41.5	25	46	31
46964	40	40	26	45	34
46717	50	49	30	41	39
46931	50	44	26.5	49	42
46436	50	45	28	50	43
46793	70	55	33.5	46	53
46420	75	50	30	55	55
46607	75	50	32	55	59
46509	100	56	33	62	79
46670	100	55	36	60	75
46857	125	59	35	64	90
46521	125	60	40	65	90
46631	150	62	37	68	99
46500	175	65	39	71	110
46465	200	68	41	74	120



Standard Form Crucibles with Reinforced Rim

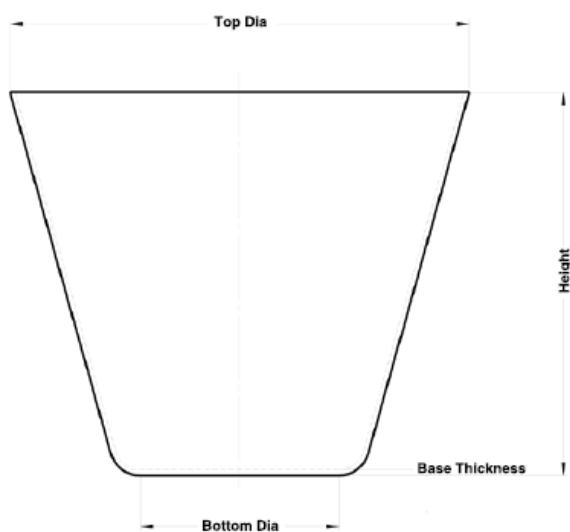
Stock No.	Capacity (ml)	Top Dia (mm)	Bottom Dia (mm)	Height (mm)	Base Thickness	Weight (gm)
46956	10	26	15.5	29	0.25	10.5
46591	10	29	17.5	24	0.25	10
46468	15	29	17.5	33	0.25	13.5
46489	15	32	19.5	27	0.25	15
46577	20	32.5	18	36	0.3	20
46894	20	37	22.5	31	0.25	20
46618	25	41	25	34	0.3	29
46353	25	35	21	39	0.3	21
46580	30	37.5	22.5	41	0.3	27.5
46722	35	43.5	26.5	36	0.3	30
46965	35	39	23.5	43	0.3	32.5
46958	40	41.5	25	46	0.3	33.5
46719	50	49	30	41	0.36	45
46561	50	44	26.5	49	0.38	46.5
46633	70	55	33.5	46	0.4	60
46517	75	50	30	55	0.41	60
46883	100	56	33	62	0.48	83.5
46737	125	59	35	64	0.48	95
46336	150	62	37	68	0.48	104
46635	175	65	39	71	0.48	116
46656	200	68	41	74	0.48	125

Lids for Standard Form Crucibles

Stock No.	Crucible Top Dia (mm)	Weight (gm)	Stock No.	Crucible Top Dia (mm)	Weight (gm)
46961	19.5	2.6	46626	41	7.2
46535	22.5	3.7	46355	41.5	7.2
46337	25.5	4.5	46710	43.5	8
46979	26	2.8	46868	44	8
46423	27.5	5	46913	44.5	12.5
46391	29	3.6	46554	49	10
46401	29	3.6	46367	49.5	14.5
46678	29.5	6.5	46744	50	10
46407	32	4.5	46655	54.5	16.5
46739	32.5	4.5	46725	55	15
46395	34.5	7.5	46567	56	15
46364	35	5.2	46843	59	15
46514	37	6	46427	59.5	21.8
46732	37.5	6	46382	62	15
46402	39	6	46735	65	18
46552	39.5	9.5	46694	68	18.8

Straight Wall Crucibles

Stock No.	Capacity (ml)	Top Dia Outer (mm)	Bottom Dia (mm)	Height (mm)	Base Thickness	Std Weight (gm)
46841	2	18	10	15	0.2	3.1
46771	2	18	10	15	0.5	7.5
46411	4.5	20	15	20	0.2	6
46705	4.5	20	15	20	0.5	13.5
46827	10	25	17	30	0.2	13
46480	10	25	17	30	0.5	23
46808	25	30	20	55	0.2	25
46432	25	30	20	55	0.5	53
46572	45	40	30	50	0.2	29
46920	45	40	30	50	0.5	67
46505	75	50	40	50	0.2	46
46887	75	50	40	50	0.5	100
46698	90	60	55	35	0.2	40
46829	90	60	55	35	0.5	80
46743	130	60	50	55	0.2	50
46992	130	60	50	55	0.5	110
46369	210	65	55	75	0.2	75
46755	210	65	55	75	0.5	175



Roasting Crucible with Lid

Stock No.	Capacity (ml)	Base Thickness	Std Weight (gm)
46768	30	0.25	25

Micro Crucibles

Stock No.	Capacity (ml)	Top Dia Outer (mm)	Bottom Dia (mm)	Height (mm)	Std Weight (gm)
46547	0.75	11	7	12	1.7
46413	1	12	7.2	13	2
46762	3	17	10	19	5
46472	5	20.5	12	22	7
46785	10	26	15.5	28	9

Lids for Micro Crucibles

Stock No.	Crucible Top Dia (mm)	Std Weight (gm)
46686	12	0.56
46993	17	1.3
46349	20.5	1.5
46776	26	2.6

Combustion Boats

Stock No.	Width (mm)	Height (mm)	Std Weight (gm)
46625	4	3	0.5
46425	4	3	0.7
46541	5	4	1.6
46599	5	4	1.9
46653	6	4	0.7
46361	7	4	1.2
46891	9	9	5.8
46524	9	9	5.6
46449	9	8	9
46508	10	8	10
46601	12	10	4
46767	12	5	3.5
46338	12	10	6
46899	12	10	7
46684	12	10	15
46862	12	12	23
46464	12	14	31
46818	13	10	3
46713	13	10	4
46648	13	10	7
46573	13	10	10
46405	14	10	18
46598	14	16	40
46363	16	13	14
46473	16	18	50

