Non-Precious Metal Labware



Alfa Aesar is pleased to offer a range of refractory metal crucibles which will help reduce laboratory costs. They provide long life, increase efficiency and lower long-run costs making them an indispensable part of a laboratory's analytical equipment.

You will find precision is the hallmark of this fine line of Johnson Matthey crucibles, offered by Alfa Aesar. Research and experimentation have developed a method of deep drawing exotic metals and alloys into laboratory vessels of unusually high precision in virtually unlimited shapes and sizes. This provides you with crucibles that are unparalleled when judged on the basis of cost, efficiency and length of service.

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Балговецнск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Вологорад (844)278-03-48 Вологорад (842)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Киемерово (3842)65-04-62 Киров (8332)68-02-04 Коспрома (4966)23-41-49 Кострома (4962)7-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курск (4722)50-90-47 Липецк (4742)52-20-81

Россия +7(495)268-04-70

Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Ноябрьск (3496)41-32-12 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47

<mark>К</mark>азахстан +7(7172)727-132

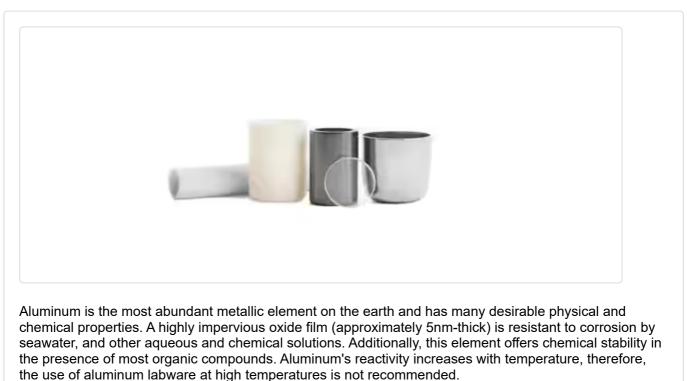
Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Саранск (8342)22-96-24 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сувитут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35

Киргизия +996(312)96-26-47

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Улан-удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)20-20-3-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Яроспавль (4852)69-52-93

https://aesar.nt-rt.ru/ || arj@nt-rt.ru

Aluminum Dishes has Flat Bottom & Straight Sides



39074	Aluminum Dish, Flat Bottom & Straight Sides;Dia (mm), 126;Wall Ht (mm), 25
39076	Aluminum Dish, Flat Bottom & Straight Sides;Dia (mm), 204;Wall Ht (mm), 51
39069	Aluminum Dish, Flat Bottom & Straight Sides;Dia (mm), 51;Wall Ht (mm), 12.5
39072	Aluminum Dish, Flat Bottom & Straight Sides;Dia (mm), 76;Wall Ht (mm), 25
39073	Aluminum Dish, Flat Bottom & Straight Sides;Dia (mm), 90;Wall Ht (mm), 51

Nickel High Form Crucible Covers



In the analytical laboratory, nickel crucibles offer high resistance to dilute alkalies at a very low cost per crucible. In some instances, nickel crucibles are preferable to zirconium: for instance, sodium peroxide fusions in which zirconium itself is to be determined; also in analysis for columbium (niobium), tantalum or low phosphorus.

Although significant amounts of nickel can be introduced into samples, it can be removed easily by several ammonia separations. Life expectancy of a nickel crucible is from 4 to 6 fusions. They present an advantage, other than cost, if small amounts of zirconium are present, or if its removal with Mandelic Acid is unsuccessful. If small amounts of phosphorus are to be determined because of extremely low solubility of zirconium phosphate, then nickel must be used.

Corrosion Resistance of Nickel

Solutions

Nickel is completely resistant to phosphoric acid as well as being highly resistant to the corrosive effect of the strongest alkalies. Nickel, however, is less than satisfactory when used for salt solutions containing oxidants such as ferric chloride or solutions of mineral acids containing oxidizing salts.

Nickel should not be used for:

- 1. Hypochlorite solutions when available chlorine is over 3 gram/liter
- 2. Strongly oxidizing acids such as nitric acid
- 3. Sulfurous acid and ammonium hydroxide in concentrations over 1%.

Wet and dry gases

No dry gases are actively corrosive to nickel at atmospheric temperature. Nickel is also resistant to dry hydrogen chloride, hydrogen fluoride, and chlorine up to about 535 C. Nickel is not affected by steam at temperatures usually encountered. It is corroded by gases containing sulfur.

NICKEL FORMS A TIGHTLY ADHERING OXIDE FILM AT 400 C IN OXIDIZING ATMOSPHERES AT TEMPERATURES TO 600 C.

In choosing crucibles for laboratory work, nickel can be effective with regard to cost per crucible, and for use in fusions where zirconium or other metals cannot be used.



36000	Nickel Cover for Crucible 35883, 20ml
36059	Nickel Cover for Crucible 35904, 30ml
36021	Nickel Cover for Crucible 35925, 50ml
35987	Nickel Cover for Crucible 35946, 75ml
35923	Nickel Cover for Crucible 36019, 250ml
35901	Nickel Cover for Crucible 36040, 500ml

Nickel High Form Crucibles



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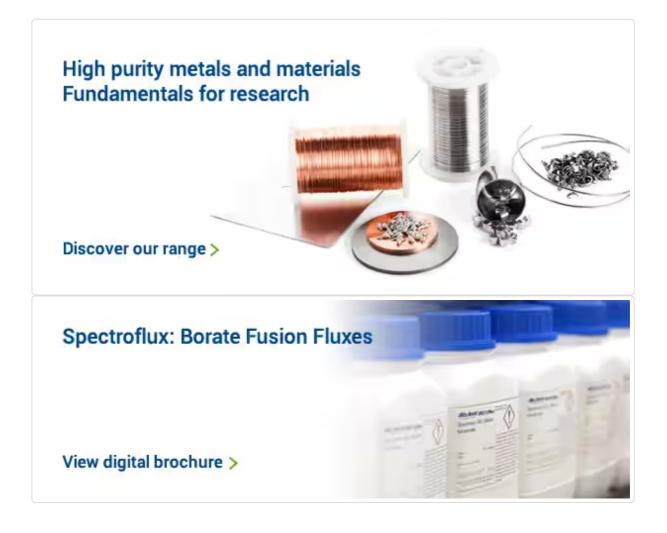
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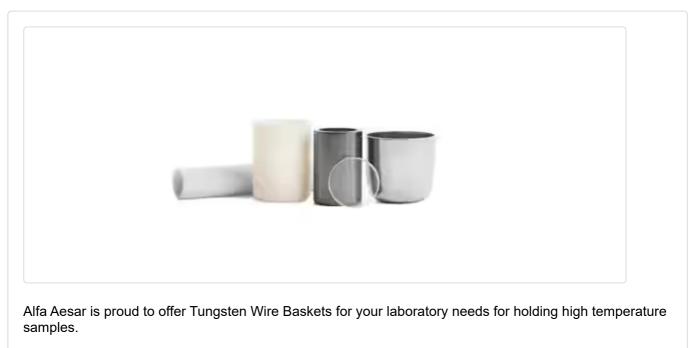
NICKEL FORMS A TIGHTLY ADHERING OXIDE FILM AT 400°C IN OXIDIZING ATMOSPHERES AT TEMPERATURES TO 600°C.

In choosing crucibles for laboratory work, nickel can be effective with regard to cost per crucible, and for use in fusions where zirconium or other metals cannot be used.



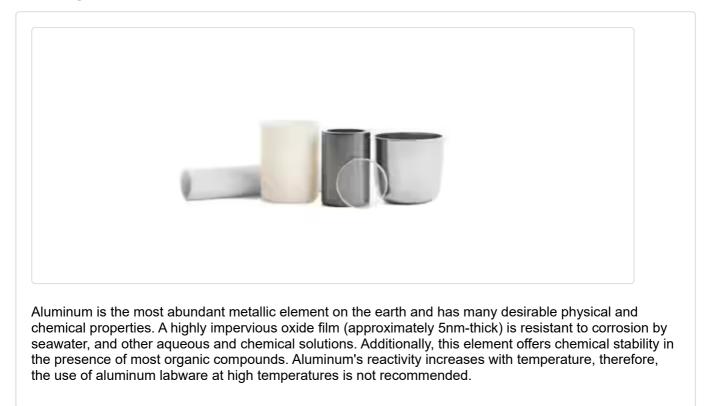
35967	High Form Nickel Crucible;Cap (ml), 100;Top Dia (mm), 61;Bottom Dia (mm), 37;Depth (mm), 62
35998	High Form Nickel Crucible;Cap (ml), 150;Top Dia (mm), 71;Bottom Dia (mm), 37;Depth (mm), 68
35883	High Form Nickel Crucible;Cap (ml), 20;Top Dia (mm), 38;Bottom Dia (mm), 22;Depth (mm), 35
36019	High Form Nickel Crucible;Cap (ml), 250;Top Dia (mm), 84;Bottom Dia (mm), 50;Depth (mm), 78
35904	High Form Nickel Crucible;Cap (ml), 30;Top Dia (mm), 41;Bottom Dia (mm), 25;Depth (mm), 43
36040	High Form Nickel Crucible;Cap (ml), 500;Top Dia (mm), 101;Bottom Dia (mm), 62;Depth (mm), 91
35925	High Form Nickel Crucible;Cap (ml), 50;Top Dia (mm), 44;Bottom Dia (mm), 32;Depth (mm), 51
35946	High Form Nickel Crucible;Cap (ml), 75;Top Dia (mm), 54;Bottom Dia (mm), 37;Depth (mm), 57

Tungsten Wire Baskets



41178	Tungsten wire basket; # turns, 8; ID(mm), 7; Ht(mm), 9; Wire leads(cm), 5.0; Wire dia(mm), 0.51
41176	Tungsten wire basket; # turns, 8; ID(mm), 9; Ht(mm), 14; Wire leads(cm), 4.0; Wire dia(mm), 0.76
41177	Tungsten wire basket; # turns, 9; ID(mm), 4; Ht(mm), 7; Wire leads(cm), 3.5; Wire dia(mm) 0.51

Aluminum Dishes, with Covers, has Flat Bottom & Straight Sides







39083	Aluminum Dish & Cover, Flat Bottom & Straight Sides;Dia (mm), 204;Wall Ht (mm), 25
39084	Aluminum Dish & Cover, Flat Bottom & Straight Sides;Dia (mm), 204;Wall Ht (mm), 51
39077	Aluminum Dish & Cover, Flat Bottom & Straight Sides;Dia (mm), 51;Wall Ht (mm), 12.5
39079	Aluminum Dish & Cover, Flat Bottom & Straight Sides;Dia (mm), 63;Wall Ht (mm), 44
39080	Aluminum Dish & Cover, Flat Bottom & Straight Sides;Dia (mm), 76;Wall Ht (mm), 25

Inconel® Alloy 601 Low Form Crucible Covers



Inconel® nickel-chromium-iron alloy 601 is a general purpose engineering material for applications that require resistance to heat and corrosion. Inconel has excellent resistance to oxidation in the 1000 to 1200 degree Centigrade temperature range and also has good corrosion resistance to many acid and aqueous salt solutions.

The limiting chemical composition of the alloy is as follows:

Limiting Chemical Composition, %, of Inconel® alloy 601.

Nickel 58.0-63.0 Chromium - 21.0-25.0 Iron - Remainder Aluminum - 1.0-1.7 Carbon - 0.10 max Manganese - 1.0 max Sulfur - 0.015 max Silicon - 0.50 max Copper - 1.0 max

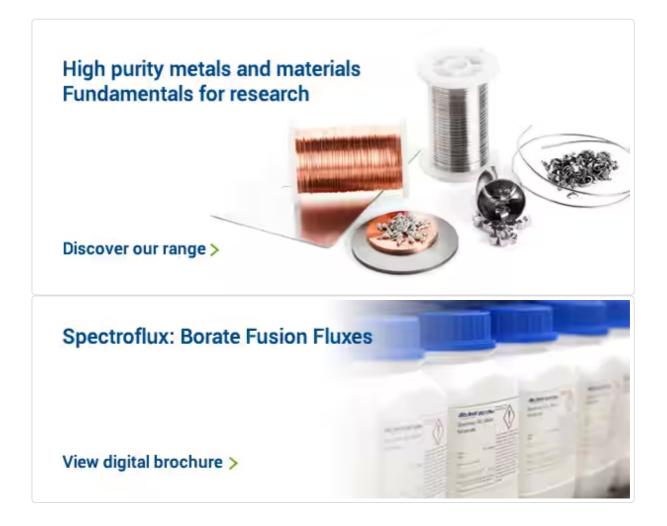
Inconel® nickel-chromium-iron alloy 601 may be your answer to high-temperature applications requiring resistance to oxidation and spalling. In addition to its resistance to corrosive oxidation, the alloy is also unaffected by rapid changes from hot to cold, and it also retains its mechanical strength at elevated temperatures. The high resistance of Inconel® Alloy 601 to oxidation, carburization or sulfidation make it well suited for vessels used in determining moisture, volatiles, fixed-carbon and ash located in most coal and coke products, or wood pulp or fiber.

It has also been recommended for use in drying and ashing biological materials whose residues are soluble in dilute acid or alkali for subsequent analysis. Trace-level determinations of principal constituent elements are excluded.

Smoothing and reshaping after use is not necessary. Uniform heating is assured, since the inherent strength of Inconel® alloy 601 laboratory ware precludes the necessity of reinforced rims and thicker bottoms. The vessels can be cleaned simply by scouring with sea-sand or some other mild abrasive.

NOTE: Strong alkaline or oxidizing fusions are not recommended with Inconel® Alloy 601 laboratory ware.

*Inconel is a trademark for products of Huntington Alloys, Inc.



36003	Inconel Cover for Crucible 35886, 15ml
36081	Inconel Cover for Crucible 35928, 25ml
36024	Inconel Cover for Crucible 35970, 45ml
35962	Inconel Cover for Crucible 36016, 75ml
35941	Inconel Cover for Crucible 36056, 100ml

Tantalum Low Form Crucible Covers



Exhibiting a melting point of $2996 \square C$ ($5432 \square F$), among the refractory metals tantalum is outranked only by tungsten ($3410 \square C/6170 \square F$). Tantalum, long recognized for its superior strength at high temperatures, is also one of the most corrosion resistant metals available, exhibiting a resistance to acid attack comparable to that of glass and platinum. Due to these qualities, strength at high temperatures and excellent corrosion resistance, laboratory crucibles fabricated from tantalum are suitable for a variety of applications.

Tantalum has been used widely in the electronics, nuclear, aerospace and chemical industries in such areas as heat exchangers, where heat must be transferred to or from acids and other corrosive fluids and vapors. It is also a superior material for the fabrication of heat shields, heating elements, etc.

Tantalum is inert to most organic and inorganic compounds up to temperatures of about $150 \square C$ ($300 \square F$). The metal displays almost complete immunity to attack by most acids, and is impervious to liquid metals up to $900 \square C$ ($1650 \square F$). Like glass, one of the few exceptions to tantalum's general acid resistance is hydrofluoric acid, which will attack tantalum readily. Strong alkalies, oxalic acid and fuming sulfuric acid should also be avoided when using tantalum, as well as any solution containing fluorine ions.

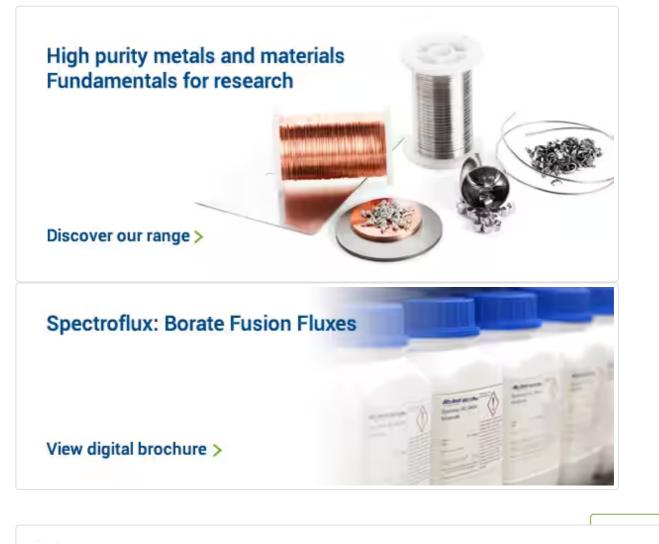
Tantalum exhibits excellent resistance to most acids, especially hydrochloric, sulfuric, nitric, and aqua regia at normal temperatures, and is also completely resistant to attack by many molten metals, including sodium, lithium, magnesium, potassium, and mercury in temperatures to $1100 \square C$ ($2000 \square F$).

Tantalum is less resistant to alkaline solutions. Concentrated alkaline solutions will attack tantalum at room temperature. The degree of attack is somewhat dependent on temperature and concentration, but in general strong alkalies above room temperature should be avoided.

Most gases, including either wet or dry chlorine or bromine are not reactive with tantalum at temperatures below $150 \square C$ ($300 \square F$). As temperature and concentration of such gases as oxygen, nitrogen, chlorine, hydrogen chloride and ammonia are increased, oxidation becomes more rapid. Fluorine, hydrogen, fluoride and gaseous SO3 attack tantalum at all temperatures.

Salts and their solutions generally do not attack tantalum unless they are prone to alkaline hydrolysis or contain fluorine ions. Chlorides and bromides such as ferric chloride, mercuric and stannous up to $175\Box C$ ($350\Box F$) are satisfactory for use with tantalum.

Heating and vaporization elements made of tantalum are frequently used in flameless atomic absorption equipment, thus eliminating the "carry-over" of ions often found when using graphite elements.



35897 Tantalum Cover for Crucible 36036, 500ml

Inconel® Alloy 601 Low Form Crucibles



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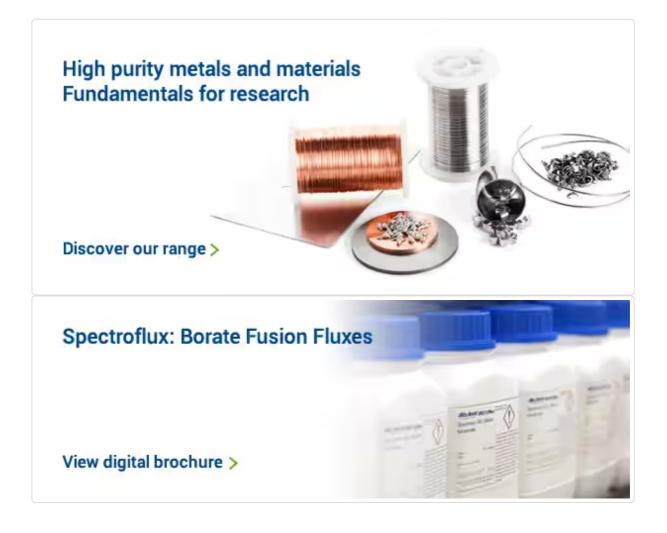
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It has also been recommended for use in drying and ashing biological materials whose residues are soluble in dilute acid or alkali for subsequent analysis. Trace-level determinations of principal constituent elements are excluded.

Smoothing and reshaping after use is not necessary. Uniform heating is assured, since the inherent strength of Inconel® alloy 601 laboratory ware precludes the necessity of reinforced rims and thicker bottoms. The vessels can be cleaned simply by scouring with sea-sand or some other mild abrasive.

NOTE: Strong alkaline or oxidizing fusions are not recommended with Inconel® Alloy 601 laboratory ware.

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36056	Low Form Inconel Crucible;Cap (ml), 100;Top Dia (mm), 59;Bottom Dia (mm), 50;Depth (mm), 46
35886	Low Form Inconel Crucible;Cap (ml), 15;Top Dia (mm), 33;Bottom Dia (mm), 25;Depth (mm), 23
35907	Low Form Inconel Crucible;Cap (ml), 20;Top Dia (mm), 33;Bottom Dia (mm), 25;Depth (mm), 30
36085	Low Form Inconel Crucible;Cap (ml), 250;Top Dia (mm), 82;Bottom Dia (mm), 66;Depth (mm), 60
35928	Low Form Inconel Crucible;Cap (ml), 25;Top Dia (mm), 45;Bottom Dia (mm), 38;Depth (mm), 23
35970	Low Form Inconel Crucible;Cap (ml), 45;Top Dia (mm), 46;Bottom Dia (mm), 38;Depth (mm), 35
36037	Low Form Inconel Crucible;Cap (ml), 500;Top Dia (mm), 102;Bottom Dia (mm), 89;Depth (mm), 66
35994	Low Form Inconel Crucible;Cap (ml), 55;Top Dia (mm), 47;Bottom Dia (mm), 38;Depth (mm), 43

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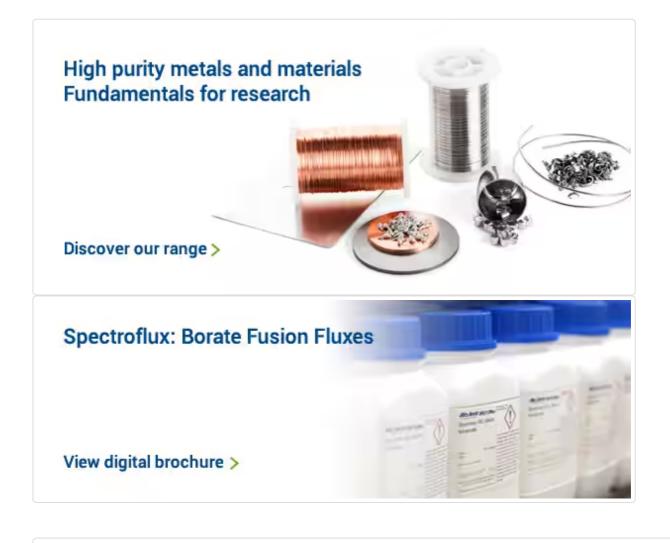
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36036 Low Form Tantalum Crucible;Cap (ml), 500;Top Dia (mm), 102;Bottom Dia (mm), 89;Depth (mm), 66

Nickel Low Form Crucible Covers



In the analytical laboratory, nickel crucibles offer high resistance to dilute alkalies at a very low cost per crucible. In some instances, nickel crucibles are preferable to zirconium: for instance, sodium peroxide fusions in which zirconium itself is to be determined; also in analysis for columbium (niobium), tantalum or low phosphorus.

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Nickel should not be used for:

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NICKEL FORMS A TIGHTLY ADHERING OXIDE FILM AT 400 C IN OXIDIZING ATMOSPHERES AT TEMPERATURES TO 600 C.

In choosing crucibles for laboratory work, nickel can be effective with regard to cost per crucible, and for use in fusions where zirconium or other metals cannot be used.



36002	Nickel Cover for Crucible 35885, 15ml
36042	Nickel Cover for Crucible 35906, 20ml
36082	Nickel Cover for Crucible 35927, 25ml
36061	Nickel Cover for Crucible 35948, 35ml
36023	Nickel Cover for Crucible 35969, 45ml
35963	Nickel Cover for Crucible 36017, 75ml
35942	Nickel Cover for Crucible 36057, 100ml
35921	Nickel Cover for Crucible 36084, 250ml

Zirconium Low Form Crucible Covers



Each zirconium crucible is handmade to an exacting tolerance for uniform wall thickness û only high-purity zirconium material is used. These crucibles are produced under the most stringent requirements to ensure ultimate tensile strength, yield strength, elongation and chemical purity.

Zirconium crucibles hold several advantages over other materials:

1. Improper heating over a Bunsen burner will not cause the reducible contents to be converted into harmful, low-fusing metals which may react with the vessel.

2. Special apparatus is not required for handling hot zirconium crucibles.

3. Sudden contact with cold, metallic surfaces will have no deleterious effect on a zirconium crucible.

4. The only cleaning agent which should not be used to clean zirconium crucibles is hydrofluoric acid.

5. Zirconium crucibles require a minimum of specialized care so smoothing and shaping is not a special consideration.

6. The inherent strength of zirconium precludes the necessity of reinforced rims and thicker bottoms.



Platinum Labware



Request a Quote >

3604	1 Zirconium Cover for Crucible 35905, 20ml
3606	9 Zirconium Cover for Crucible 35926, 25ml
3606	0 Zirconium Cover for Crucible 35947, 35ml
3602	2 Zirconium Cover for Crucible 35968, 45ml
3598	5 Zirconium Cover for Crucible 35997, 55ml
3590	0 Zirconium Cover for Crucible 36039, 500ml
3592	2 Zirconium Cover for Crucible 36058, 250ml
3594	3 Zirconium Cover for Crucible 36083, 100ml

Nickel Low Form Crucibles



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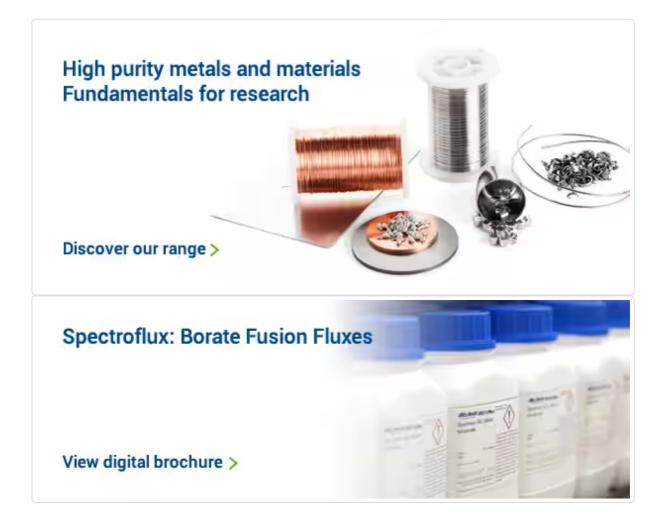
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36057	Low Form Nickel Crucible;Cap (ml), 100;Top Dia (mm), 59;Bottom Dia (mm), 50;Depth (mm), 46
35906	Low Form Nickel Crucible;Cap (ml), 20;Top Dia (mm), 33;Bottom Dia (mm), 25;Depth (mm), 30
36084	Low Form Nickel Crucible;Cap (ml), 250;Top Dia (mm), 82;Bottom Dia (mm), 66;Depth (mm), 60
35927	Low Form Nickel Crucible;Cap (ml), 25;Top Dia (mm), 45;Bottom Dia (mm), 38;Depth (mm), 23
35948	Low Form Nickel Crucible;Cap (ml), 35;Top Dia (mm), 46;Bottom Dia (mm), 38;Depth (mm), 30
35969	Low Form Nickel Crucible;Cap (ml), 45;Top Dia (mm), 46;Bottom Dia (mm), 38;Depth (mm), 35
35996	Low Form Nickel Crucible;Cap (ml), 55;Top Dia (mm), 47;Bottom Dia (mm), 38;Depth (mm), 43

Zirconium Low Form Crucibles



Each zirconium crucible is handmade to an exacting tolerance for uniform wall thickness û only high-purity zirconium material is used. These crucibles are produced under the most stringent requirements to ensure ultimate tensile strength, yield strength, elongation and chemical purity.

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1. Improper heating over a Bunsen burner will not cause the reducible contents to be converted into harmful, low-fusing metals which may react with the vessel.

2. Special apparatus is not required for handling hot zirconium crucibles.

3. Sudden contact with cold, metallic surfaces will have no deleterious effect on a zirconium crucible.

4. The only cleaning agent which should not be used to clean zirconium crucibles is hydrofluoric acid.

5. Zirconium crucibles require a minimum of specialized care so smoothing and shaping is not a special consideration.

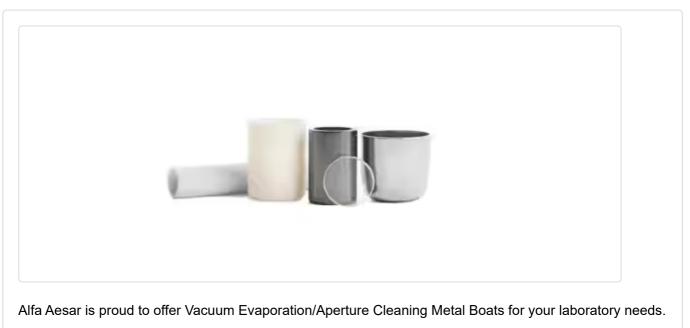
6. The inherent strength of zirconium precludes the necessity of reinforced rims and thicker bottoms.





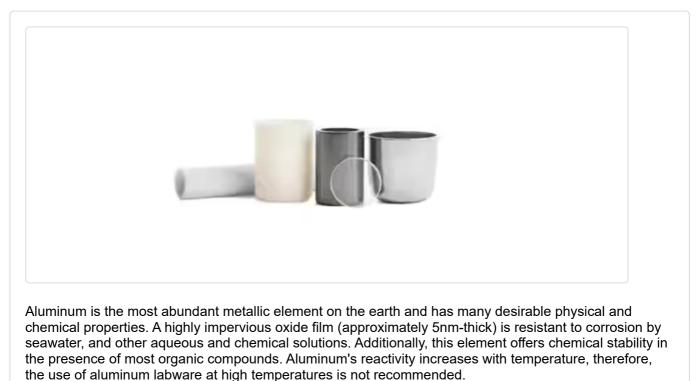
36083	Low Form Zirconium Crucible;Cap (ml), 100;Top Dia (mm), 59;Bottom Dia (mm), 50;Depth (mm), 46
35905	Low Form Zirconium Crucible;Cap (ml), 20;Top Dia (mm), 33;Bottom Dia (mm), 25;Depth (mm), 30
36058	Low Form Zirconium Crucible;Cap (ml), 250;Top Dia (mm), 82;Bottom Dia (mm), 66;Depth (mm), 60
35926	Low Form Zirconium Crucible;Cap (ml), 25;Top Dia (mm), 45;Bottom Dia (mm), 38;Depth (mm), 23
35947	Low Form Zirconium Crucible;Cap (ml), 35;Top Dia (mm), 46;Bottom Dia (mm), 38;Depth (mm), 30
35968	Low Form Zirconium Crucible;Cap (ml), 45;Top Dia (mm), 46;Bottom Dia (mm), 38;Depth (mm), 35
36039	Low Form Zirconium Crucible;Cap (ml), 500;Top Dia (mm), 102;Bottom Dia (mm), 89;Depth (mm), 66
35997	Low Form Zirconium Crucible;Cap (ml), 55;Top Dia (mm), 47;Bottom Dia (mm), 38;Depth (mm), 43
36018	Low Form Zirconium Crucible;Cap (ml), 75;Top Dia (mm), 51;Bottom Dia (mm), 41;Depth (mm), 43

Vacuum Evaporation/Aperture Cleaning Metal Boats



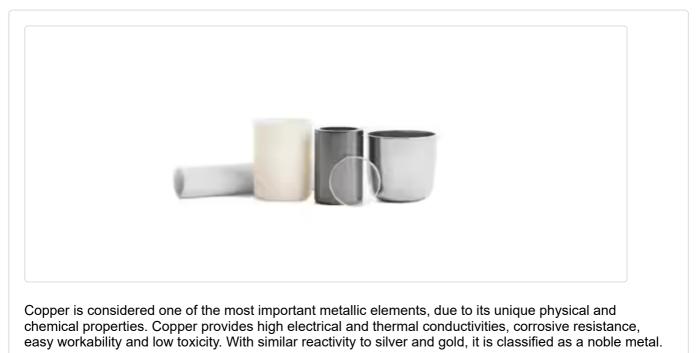
41215	Molybdenum boat; Thickness (mm), 0.05; Length (mm), 75
41216	Platinum boat; Thickness (mm), 0.05; Length (mm), 75mm
41217	Tantalum boat; Thickness (mm), 0.05; Length (mm), 75
42981	Tungsten boat; Thickness (mm), 0.05; Length (mm), 32

Aluminum Beakers



39	9049	Aluminum Beaker with Pourout Lip;Cap (ml), 1000;Top Dia (mm), 108;Bottom Dia (mm), 95;Ht (mm), 137
3	9046	Aluminum Beaker with Pourout Lip;Cap (ml), 125;Top Dia (mm), 56;Bottom Dia (mm), 48;Ht (mm), 57
् हे र	9050	Aluminum Beaker with Pourout Lip;Cap (ml), 2000;Top Dia (mm), 137;Bottom Dia (mm), 117;Ht (mm), 171
3	9047	Aluminum Beaker with Pourout Lip;Cap (ml), 250;Top Dia (mm), 63;Bottom Dia (mm), 57;Ht (mm), 92
3	9048	Aluminum Beaker with Pourout Lip;Cap (ml), 500;Top Dia (mm), 87;Bottom Dia (mm), 76;Ht (mm), 114

Copper Beakers



39052	Copper Beaker with Pourout Lip;Cap (ml), 125;Top Dia (mm), 56;Bottom Dia (mm), 48;Ht (mm), 67
39056	Copper Beaker with Pourout Lip;Cap (ml), 2000;Top Dia (mm), 137;Bottom Dia (mm), 117;Ht (mm), 171
39053	Copper Beaker with Pourout Lip;Cap (ml), 250;Top Dia (mm), 63;Bottom Dia (mm), 57;Ht (mm), 92
39054	Copper Beaker with Pourout Lip;Cap (ml), 500;Top Dia (mm), 87;Bottom Dia (mm), 76;Ht (mm), 114
39051	Copper Beaker with Pourout Lip;Cap (ml), 60;Top Dia (mm), 46;Bottom Dia (mm), 40;Ht (mm), 51

Nickel Beakers



In the analytical laboratory, nickel crucibles offer high resistance to dilute alkalies at a very low cost per crucible. In some instances, nickel crucibles are preferable to zirconium: for instance, sodium peroxide fusions in which zirconium itself is to be determined; also in analysis for columbium (niobium), tantalum or low phosphorus.

Although significant amounts of nickel can be introduced into samples, it can be removed easily by several ammonia separations. Life expectancy of a nickel crucible is from 4 to 6 fusions. They present an advantage, other than cost, if small amounts of zirconium are present, or if its removal with Mandelic Acid is unsuccessful. If small amounts of phosphorus are to be determined because of extremely low solubility of zirconium phosphate, then nickel must be used.

Corrosion Resistance of Nickel

Solutions

Nickel is completely resistant to phosphoric acid as well as being highly resistant to the corrosive effect of the strongest alkalies. Nickel, however, is less than satisfactory when used for salt solutions containing oxidants such as ferric chloride or solutions of mineral acids containing oxidizing salts.

Nickel should not be used for:

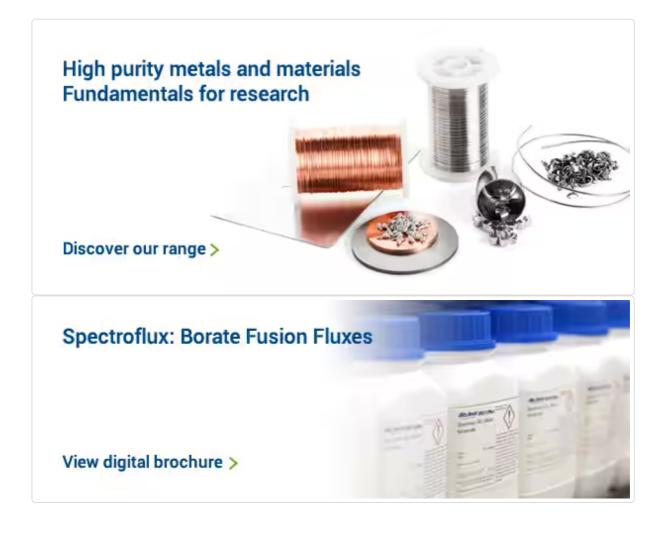
- 1. Hypochlorite solutions when available chlorine is over 3 gram/liter
- 2. Strongly oxidizing acids such as nitric acid
- 3. Sulfurous acid and ammonium hydroxide in concentrations over 1%.

Wet and dry gases

No dry gases are actively corrosive to nickel at atmospheric temperature. Nickel is also resistant to dry hydrogen chloride, hydrogen fluoride, and chlorine up to about 535 C. Nickel is not affected by steam at temperatures usually encountered. It is corroded by gases containing sulfur.

NICKEL FORMS A TIGHTLY ADHERING OXIDE FILM AT 400 C IN OXIDIZING ATMOSPHERES AT TEMPERATURES TO 600 C.

In choosing crucibles for laboratory work, nickel can be effective with regard to cost per crucible, and for use in fusions where zirconium or other metals cannot be used.



	39058	Nickel Beaker with Pourout Lip;Cap (ml), 125;Top Dia (mm), 56;Bottom Dia (mm), 48;Ht (mm), 67
	39062	Nickel Beaker with Pourout Lip;Cap (ml), 2000;Top Dia (mm), 137;Bottom Dia (mm), 117;Ht (mm), 171
	39059	Nickel Beaker with Pourout Lip;Cap (ml), 250;Top Dia (mm), 63;Bottom Dia (mm), 57;Ht (mm), 92

Pour Plates



Pour plates provide an excellent heat-sink for quenching fusions or pouring fluid melts to solidify into a button for rapid, easy handling and solution.

Alkali metal carbonates, bisulfates or lithium fluxes are readily employed without contamination. These pour plates also provide safe handling of carbonate or bisulfate fluxings in platinum ware cleaning. Copper plate is readily cleaned with cold, diluted aqueous ammonia washing.

Available in either copper or stainless steel, these pour plates are fabricated from one solid piece of highpurity metal. Outside diameter is 6 in. Material thickness is 1/8 in. Plates are finished with a 4 in. diameter flat depression in the center and raised edges to avoid spillage.



37994 Pour Plate;Material, Copper;OD (in), 6;Thickness (in), 1/8;Depression Dia (in), 4;Net Wt (lb), 1.1
37993 Pour Plate;Material, Stainless Steel (304SS);OD (in), 6;Thickness (in), 1/8;Depression Dia (in), 4;Net Wt (lb), 0.9

Flanged Rim



Listed below are some fluxes that can be used in these zirconium crucibles.

Sodium Peroxide Fusion

Used with very refractory or high-silica materials such as chromite, magnetite, illmenite, rutile, silicon, silicon carbide, and certain alloys and steels. An excellent general flux for almost any material.

Sodium Carbonate Fusion

Decomposes most silicates of aluminum, calcium, chromium, nickel; also halides of silver; and sulfates of barium and lead.

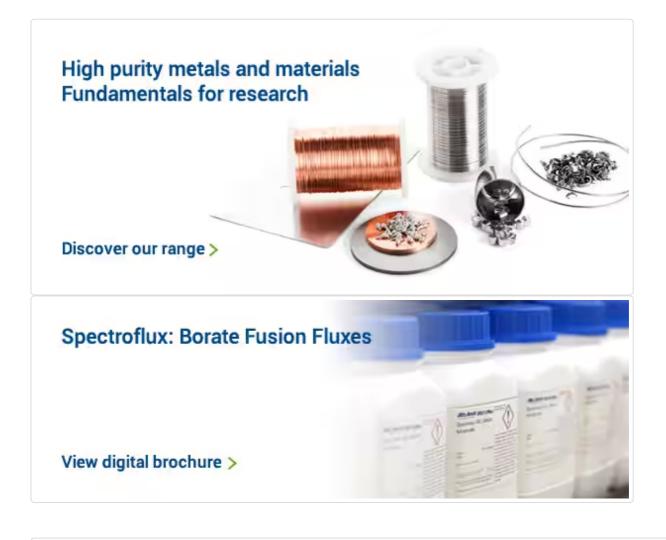
Lithium Salt Fusion

Flux for oxide and silicate materials when sodium and potassium need to be determined or when large amounts of sodium would interfere with x-ray fluorescence or atomic absorption procedures.

While prolonged exposure to air at temperatures of more than $750 \square C$ can have a negative effect on zirconium, this can be reduced by either: (1) using the cooler, but reducing, portion of the flame, or (2) enveloping the crucible in an inert atmosphere.

Zirconium Crucibles for Automatic Fusion Equipment

The style here is with a Flanged Ring A formed rim, integral to the crucible (not welded on), at the crucibleÆs top edge.



	35945	Zirconium Crucible, with Flanged Rim;Top Dia (mm), 39;Bottom Dia (mm), 29;Height (mm), 33;Ring/Rim OD (mm), 44
	35902	Zirconium Crucible, with Flanged Rim;Top Dia (mm), 47;Bottom Dia (mm), 36;Height (mm), 35;Ring/Rim OD (mm), 54

Slide-On Ring



Listed below are some fluxes that can be used in these zirconium crucibles.

Sodium Peroxide Fusion

Used with very refractory or high-silica materials such as chromite, magnetite, illmenite, rutile, silicon, silicon carbide, and certain alloys and steels. An excellent general flux for almost any material.

Sodium Carbonate Fusion

Decomposes most silicates of aluminum, calcium, chromium, nickel; also halides of silver; and sulfates of barium and lead.

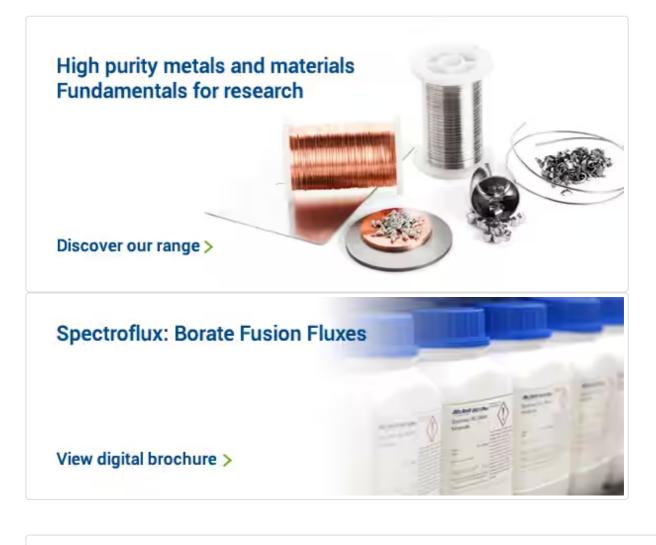
Lithium Salt Fusion

Flux for oxide and silicate materials when sodium and potassium need to be determined or when large amounts of sodium would interfere with x-ray fluorescence or atomic absorption procedures.

While prolonged exposure to air at temperatures of more than $750 \square C$ can have a negative effect on zirconium, this can be reduced by either: (1) using the cooler, but reducing, portion of the flame, or (2) enveloping the crucible in an inert atmosphere.

Zirconium Crucibles for Automatic Fusion Equipment

The style here is with a Slide-On Ring A removable ring that slides up, fitting approximately 0.20 in. below the top of the crucible.



Zirconium Crucible, with Slide On Ring;Top Dia (mm), 42;Bottom Dia (mm), 29;Height (mm), 44;Ring/Rim OD (mm), 48

35924

Snap-On Ring



Listed below are some fluxes that can be used in these zirconium crucibles.

Sodium Peroxide Fusion

Used with very refractory or high-silica materials such as chromite, magnetite, illmenite, rutile, silicon, silicon carbide, and certain alloys and steels. An excellent general flux for almost any material.

Sodium Carbonate Fusion

Decomposes most silicates of aluminum, calcium, chromium, nickel; also halides of silver; and sulfates of barium and lead.

Lithium Salt Fusion

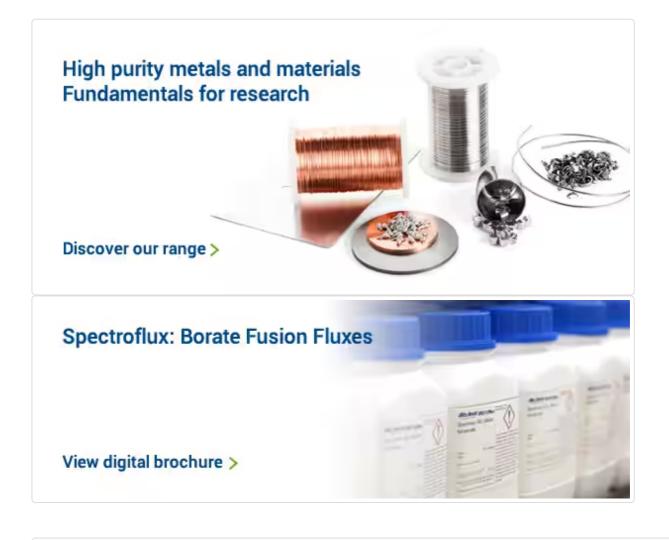
Flux for oxide and silicate materials when sodium and potassium need to be determined or when large amounts of sodium would interfere with x-ray fluorescence or atomic absorption procedures.

While prolonged exposure to air at temperatures of more than $750 \square C$ can have a negative effect on zirconium, this can be reduced by either: (1) using the cooler, but reducing, portion of the flame, or (2) enveloping the crucible in an inert atmosphere.

Zirconium Crucibles for Automatic Fusion Equipment

The style here is with a Snap-On Ring

A removable ring that snap-fits into a machined groove located approximately 0.20 in. below the top of the crucible.



	35903	Zirconium Crucible, with Snap On Ring;Top Dia (mm), 39;Bottom Dia (mm), 29;Height (mm), 33;Ring/Rim OD (mm), 44	
	36020	Zirconium Crucible, with Snap On Ring;Top Dia (mm), 42;Bottom Dia (mm), 29;Height (mm), 44;Ring/Rim OD (mm), 48	

Cleaning Kit for Laboratory Crucibles



This crucible cleaning kit contains all the materials you'll need to safely clean most types of laboratory crucibles, including metallic crucibles such as zirconium, nickel, molybdenum, tantalum and platinum, as well as crucibles of ceramic or glass.

The kit includes a supply of liquid cleaner, a variety of abrasive materials and instructions to:

Extend the life of your laboratory crucibles by safely cleaning them for reuse, without damaging the crucibles.

Reduce sample contamination, either from residue resulting from unclean crucibles, or contamination from the cleaning materials themselves.



37995 Cleaning Kit for Laboratory Crucibles

Inconel® Alloy 601 Straight Wall Crucible Covers



Inconel® nickel-chromium-iron alloy 601 is a general purpose engineering material for applications that require resistance to heat and corrosion. Inconel has excellent resistance to oxidation in the 1000 to 1200 degree Centigrade temperature range and also has good corrosion resistance to many acid and aqueous salt solutions.

The limiting chemical composition of the alloy is as follows:

Limiting Chemical Composition, %, of Inconel® alloy 601.

Nickel 58.0-63.0 Chromium - 21.0-25.0 Iron - Remainder Aluminum - 1.0-1.7 Carbon - 0.10 max Manganese - 1.0 max Sulfur - 0.015 max Silicon - 0.50 max Copper - 1.0 max

Inconel® nickel-chromium-iron alloy 601 may be your answer to high-temperature applications requiring resistance to oxidation and spalling. In addition to its resistance to corrosive oxidation, the alloy is also unaffected by rapid changes from hot to cold, and it also retains its mechanical strength at elevated temperatures. The high resistance of Inconel® Alloy 601 to oxidation, carburization or sulfidation make it well suited for vessels used in determining moisture, volatiles, fixed-carbon and ash located in most coal and coke products, or wood pulp or fiber.

It has also been recommended for use in drying and ashing biological materials whose residues are soluble in dilute acid or alkali for subsequent analysis. Trace-level determinations of principal constituent elements are excluded.

Smoothing and reshaping after use is not necessary. Uniform heating is assured, since the inherent strength of Inconel® alloy 601 laboratory ware precludes the necessity of reinforced rims and thicker bottoms. The vessels can be cleaned simply by scouring with sea-sand or some other mild abrasive.

NOTE: Strong alkaline or oxidizing fusions are not recommended with Inconel® Alloy 601 laboratory ware.

*Inconel is a trademark for products of Huntington Alloys, Inc.



3609	95 Inconel Cover for Crucible 35911, 10ml
3600	66 Inconel Cover for Crucible 35932, 15ml
3610	03 Inconel Cover for Crucible 35953, 20ml
3604	47 Inconel Cover for Crucible 35974, 25ml
359	58 Inconel Cover for Crucible 36052, 100ml
3602	28 Inconel Cover for Crucible 36072, 55ml
359	16 Inconel Cover for Crucible 36090, 500ml
3593	37 Inconel Cover for Crucible 36102, 250ml

Nickel Straight Wall Crucible Covers



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Solutions

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- 3. Sulfurous acid and ammonium hydroxide in concentrations over 1%.

Wet and dry gases

No dry gases are actively corrosive to nickel at atmospheric temperature. Nickel is also resistant to dry hydrogen chloride, hydrogen fluoride, and chlorine up to about 535 C. Nickel is not affected by steam at temperatures usually encountered. It is corroded by gases containing sulfur.

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36006	Nickel Cover for Crucible 35889, 5ml
36113	Nickel Cover for Crucible 35991, 35ml
36046	Nickel Cover for Crucible 36013, 45ml
35895	Nickel Cover for Crucible 36034, 1000ml
35959	Nickel Cover for Crucible 36053, 100ml
36027	Nickel Cover for Crucible 36071, 55ml
35938	Nickel Cover for Crucible 36098, 250ml

Zirconium Straight Wall Crucible Covers



Each zirconium crucible is handmade to an exacting tolerance for uniform wall thickness û only high-purity zirconium material is used. These crucibles are produced under the most stringent requirements to ensure ultimate tensile strength, yield strength, elongation and chemical purity.

Zirconium crucibles hold several advantages over other materials:

1. Improper heating over a Bunsen burner will not cause the reducible contents to be converted into harmful, low-fusing metals which may react with the vessel.

2. Special apparatus is not required for handling hot zirconium crucibles.

3. Sudden contact with cold, metallic surfaces will have no deleterious effect on a zirconium crucible.

4. The only cleaning agent which should not be used to clean zirconium crucibles is hydrofluoric acid.

5. Zirconium crucibles require a minimum of specialized care so smoothing and shaping is not a special consideration.

6. The inherent strength of zirconium precludes the necessity of reinforced rims and thicker bottoms.



Platinum Labware



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360	05 Zirconium Cover for Crucible 35888, 5ml
360	45 Zirconium Cover for Crucible 35909, 10ml
360	79 Zirconium Cover for Crucible 35930, 15ml
361	07 Zirconium Cover for Crucible 35951, 20ml
360	64 Zirconium Cover for Crucible 35972, 25ml
360	93 Zirconium Cover for Crucible 35992, 35ml
361	11 Zirconium Cover for Crucible 36014, 45ml
358	96 Zirconium Cover for Crucible 36035, 1000ml
359	60 Zirconium Cover for Crucible 36054, 100ml
360	26 Zirconium Cover for Crucible 36070, 55ml
359	18 Zirconium Cover for Crucible 36087, 500ml
359	39 Zirconium Cover for Crucible 36097, 250ml

Inconel® Alloy 601 Straight Wall Crucibles



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NOTE: Strong alkaline or oxidizing fusions are not recommended with Inconel® Alloy 601 laboratory ware.

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36052	Straight Wall Inconel Crucible;Cap (ml), 100;Outside Dia (mm), 59;Depth (mm), 45
35911	Straight Wall Inconel Crucible;Cap (ml), 10;Outside Dia (mm), 27;Depth (mm), 22
35932	Straight Wall Inconel Crucible;Cap (ml), 15;Outside Dia (mm), 33;Depth (mm), 22
35953	Straight Wall Inconel Crucible;Cap (ml), 20;Outside Dia (mm), 33;Depth (mm), 29
36102	Straight Wall Inconel Crucible;Cap (ml), 250;Outside Dia (mm), 82;Depth (mm), 59
35974	Straight Wall Inconel Crucible;Cap (ml), 25;Outside Dia (mm), 45;Depth (mm), 22
36012	Straight Wall Inconel Crucible;Cap (ml), 45;Outside Dia (mm), 46;Depth (mm), 34
36090	Straight Wall Inconel Crucible;Cap (ml), 500;Outside Dia (mm), 101;Depth (mm), 65
36072	Straight Wall Inconel Crucible;Cap (ml), 55;Outside Dia (mm), 47;Depth (mm), 41

Nickel Straight Wall Crucibles



In the analytical laboratory, nickel crucibles offer high resistance to dilute alkalies at a very low cost per crucible. In some instances, nickel crucibles are preferable to zirconium: for instance, sodium peroxide fusions in which zirconium itself is to be determined; also in analysis for columbium (niobium), tantalum or low phosphorus.

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Solutions

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In choosing crucibles for laboratory work, nickel can be effective with regard to cost per crucible, and for use in fusions where zirconium or other metals cannot be used.



36034	Straight Wall Nickel Crucible;Cap (ml), 1000;Outside Dia (mm), 127;Depth (mm), 89
36053	Straight Wall Nickel Crucible;Cap (ml), 100;Outside Dia (mm), 59;Depth (mm), 45
35910	Straight Wall Nickel Crucible;Cap (ml), 10;Outside Dia (mm), 27;Depth (mm), 22
35952	Straight Wall Nickel Crucible;Cap (ml), 20;Outside Dia (mm), 33;Depth (mm), 29
36098	Straight Wall Nickel Crucible;Cap (ml), 250;Outside Dia (mm), 82;Depth (mm), 59
35973	Straight Wall Nickel Crucible;Cap (ml), 25;Outside Dia (mm), 45;Depth (mm), 22
35991	Straight Wall Nickel Crucible;Cap (ml), 35;Outside Dia (mm), 46;Depth (mm), 29
36013	Straight Wall Nickel Crucible;Cap (ml), 45;Outside Dia (mm), 46;Depth (mm), 34
36088	Straight Wall Nickel Crucible;Cap (ml), 500;Outside Dia (mm), 101;Depth (mm), 65

Zirconium Straight Wall Crucibles



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2. Special apparatus is not required for handling hot zirconium crucibles.

3. Sudden contact with cold, metallic surfaces will have no deleterious effect on a zirconium crucible.

4. The only cleaning agent which should not be used to clean zirconium crucibles is hydrofluoric acid.

5. Zirconium crucibles require a minimum of specialized care so smoothing and shaping is not a special consideration.

6. The inherent strength of zirconium precludes the necessity of reinforced rims and thicker bottoms.



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36035	Straight Wall Zirconium Crucible;Cap (ml), 1000;Outside Dia (mm), 127;Depth (mm), 89
36054	Straight Wall Zirconium Crucible;Cap (ml), 100;Outside Dia (mm), 59;Depth (mm), 45
35909	Straight Wall Zirconium Crucible;Cap (ml), 10;Outside Dia (mm), 27;Depth (mm), 22
35930	Straight Wall Zirconium Crucible;Cap (ml), 15;Outside Dia (mm), 33;Depth (mm), 22
35951	Straight Wall Zirconium Crucible;Cap (ml), 20;Outside Dia (mm), 33;Depth (mm), 29
36097	Straight Wall Zirconium Crucible;Cap (ml), 250;Outside Dia (mm), 82;Depth (mm), 59
35972	Straight Wall Zirconium Crucible;Cap (ml), 25;Outside Dia (mm), 45;Depth (mm), 22
35992	Straight Wall Zirconium Crucible;Cap (ml), 35;Outside Dia (mm), 46;Depth (mm), 29
36014	Straight Wall Zirconium Crucible;Cap (ml), 45;Outside Dia (mm), 46;Depth (mm), 34
36087	Straight Wall Zirconium Crucible;Cap (ml), 500;Outside Dia (mm), 101;Depth (mm), 65
36070	Straight Wall Zirconium Crucible;Cap (ml), 55;Outside Dia (mm), 47;Depth (mm), 41
36106	Straight Wall Zirconium Crucible;Cap (ml), 75;Outside Dia (mm), 51;Depth (mm), 41

Molybdenum Straight Wall Crucible Covers



Molybdenum is a refractory metal recognized for its excellent strength at high temperatures, its high melting point of $2610 \square C$ ($4370 \square F$) and its high resistance to corrosion. It serves a definite purpose in the laboratory.

This high melting point makes molybdenum excellent for use as vapor deposition boats and dishes. Vessels of molybdenum have also been used for such applications as processing nuclear fuel pellets at temperatures up to $1650 \square C$ ($3000 \square F$), and molybdenum crucibles are durable and will withstand repeated rough handling.

In air or oxygen-containing atmospheres, molybdenum is not oxidized to any considerable degree at temperatures below 400 \Box C (750 \Box F). At 400 \Box C (750 \Box F) and up molybdic oxide is formed and begins to sublime. It is recommended that for high temperature applications, except for brief periods, fusions should be performed in a vacuum or inert atmosphere. The crucibles could then be heated up to about 2100 \Box C (3800 \Box F).



36067 Molybdenum Cover for Crucible 35912, 10ml36048 Molybdenum Cover for Crucible 35954, 20ml

Tantalum Straight Wall Crucible Covers



Exhibiting a melting point of $2996 \square C$ ($5432 \square F$), among the refractory metals tantalum is outranked only by tungsten ($3410 \square C/6170 \square F$). Tantalum, long recognized for its superior strength at high temperatures, is also one of the most corrosion resistant metals available, exhibiting a resistance to acid attack comparable to that of glass and platinum. Due to these qualities, strength at high temperatures and excellent corrosion resistance, laboratory crucibles fabricated from tantalum are suitable for a variety of applications.

Tantalum has been used widely in the electronics, nuclear, aerospace and chemical industries in such areas as heat exchangers, where heat must be transferred to or from acids and other corrosive fluids and vapors. It is also a superior material for the fabrication of heat shields, heating elements, etc.

Tantalum is inert to most organic and inorganic compounds up to temperatures of about $150 \square C$ ($300 \square F$). The metal displays almost complete immunity to attack by most acids, and is impervious to liquid metals up to $900 \square C$ ($1650 \square F$). Like glass, one of the few exceptions to tantalum's general acid resistance is hydrofluoric acid, which will attack tantalum readily. Strong alkalies, oxalic acid and fuming sulfuric acid should also be avoided when using tantalum, as well as any solution containing fluorine ions.

Tantalum exhibits excellent resistance to most acids, especially hydrochloric, sulfuric, nitric, and aqua regia at normal temperatures, and is also completely resistant to attack by many molten metals, including sodium, lithium, magnesium, potassium, and mercury in temperatures to $1100 \square C$ ($2000 \square F$).

Tantalum is less resistant to alkaline solutions. Concentrated alkaline solutions will attack tantalum at room temperature. The degree of attack is somewhat dependent on temperature and concentration, but in general strong alkalies above room temperature should be avoided.

Most gases, including either wet or dry chlorine or bromine are not reactive with tantalum at temperatures below $150 \square C$ ($300 \square F$). As temperature and concentration of such gases as oxygen, nitrogen, chlorine, hydrogen chloride and ammonia are increased, oxidation becomes more rapid. Fluorine, hydrogen, fluoride and gaseous SO3 attack tantalum at all temperatures.

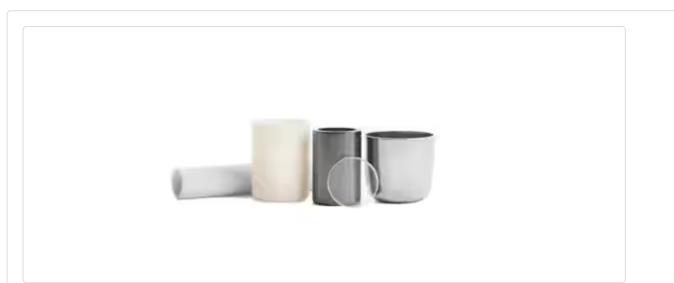
Salts and their solutions generally do not attack tantalum unless they are prone to alkaline hydrolysis or contain fluorine ions. Chlorides and bromides such as ferric chloride, mercuric and stannous up to $175 \square C$ ($350 \square F$) are satisfactory for use with tantalum.

Heating and vaporization elements made of tantalum are frequently used in flameless atomic absorption equipment, thus eliminating the "carry-over" of ions often found when using graphite elements.



	36075	Tantalum Cover for Crucible 35913, 10ml
	36115	Tantalum Cover for Crucible 36031, 1000ml

Molybdenum Straight Wall Crucibles



Molybdenum is a refractory metal recognized for its excellent strength at high temperatures, its high melting point of $2610 \square C$ ($4370 \square F$) and its high resistance to corrosion. It serves a definite purpose in the laboratory.

This high melting point makes molybdenum excellent for use as vapor deposition boats and dishes. Vessels of molybdenum have also been used for such applications as processing nuclear fuel pellets at temperatures up to $1650 \square C$ ($3000 \square F$), and molybdenum crucibles are durable and will withstand repeated rough handling.

In air or oxygen-containing atmospheres, molybdenum is not oxidized to any considerable degree at temperatures below 400 \Box C (750 \Box F). At 400 \Box C (750 \Box F) and up molybdic oxide is formed and begins to sublime. It is recommended that for high temperature applications, except for brief periods, fusions should be performed in a vacuum or inert atmosphere. The crucibles could then be heated up to about 2100 \Box C (3800 \Box F).



	35912	Straight Wall Molybdenum Crucible;Cap (ml), 10;Outside Dia (mm), 27;Depth (mm), 22
	35975	Straight Wall Molybdenum Crucible;Cap (ml), 25;Outside Dia (mm), 45;Depth (mm), 22
	35989	Straight Wall Molybdenum Crucible;Cap (ml), 35;Outside Dia (mm), 46;Depth (mm), 29

Tantalum Straight Wall Crucibles



Exhibiting a melting point of $2996 \square C$ ($5432 \square F$), among the refractory metals tantalum is outranked only by tungsten ($3410 \square C/6170 \square F$). Tantalum, long recognized for its superior strength at high temperatures, is also one of the most corrosion resistant metals available, exhibiting a resistance to acid attack comparable to that of glass and platinum. Due to these qualities, strength at high temperatures and excellent corrosion resistance, laboratory crucibles fabricated from tantalum are suitable for a variety of applications.

Tantalum has been used widely in the electronics, nuclear, aerospace and chemical industries in such areas as heat exchangers, where heat must be transferred to or from acids and other corrosive fluids and vapors. It is also a superior material for the fabrication of heat shields, heating elements, etc.

Tantalum is inert to most organic and inorganic compounds up to temperatures of about $150 \square C$ ($300 \square F$). The metal displays almost complete immunity to attack by most acids, and is impervious to liquid metals up to $900 \square C$ ($1650 \square F$). Like glass, one of the few exceptions to tantalum's general acid resistance is hydrofluoric acid, which will attack tantalum readily. Strong alkalies, oxalic acid and fuming sulfuric acid should also be avoided when using tantalum, as well as any solution containing fluorine ions.

Tantalum exhibits excellent resistance to most acids, especially hydrochloric, sulfuric, nitric, and aqua regia at normal temperatures, and is also completely resistant to attack by many molten metals, including sodium, lithium, magnesium, potassium, and mercury in temperatures to $1100 \square C$ ($2000 \square F$).

Tantalum is less resistant to alkaline solutions. Concentrated alkaline solutions will attack tantalum at room temperature. The degree of attack is somewhat dependent on temperature and concentration, but in general strong alkalies above room temperature should be avoided.

Most gases, including either wet or dry chlorine or bromine are not reactive with tantalum at temperatures below $150 \square C$ ($300 \square F$). As temperature and concentration of such gases as oxygen, nitrogen, chlorine, hydrogen chloride and ammonia are increased, oxidation becomes more rapid. Fluorine, hydrogen, fluoride and gaseous SO3 attack tantalum at all temperatures.

Salts and their solutions generally do not attack tantalum unless they are prone to alkaline hydrolysis or contain fluorine ions. Chlorides and bromides such as ferric chloride, mercuric and stannous up to $175\Box C$ ($350\Box F$) are satisfactory for use with tantalum.

Heating and vaporization elements made of tantalum are frequently used in flameless atomic absorption equipment, thus eliminating the "carry-over" of ions often found when using graphite elements.



36091	Straight Wall Tantalum Crucible;Cap (ml), 100;Outside Dia (mm), 59;Depth (mm), 45
35913	Straight Wall Tantalum Crucible;Cap (ml), 10;Outside Dia (mm), 27;Depth (mm), 22
35955	Straight Wall Tantalum Crucible;Cap (ml), 20;Outside Dia (mm), 33;Depth (mm), 29
35988	Straight Wall Tantalum Crucible;Cap (ml), 35;Outside Dia (mm), 46;Depth (mm), 29
36010	Straight Wall Tantalum Crucible;Cap (ml), 45;Outside Dia (mm), 46;Depth (mm), 34
35892	Straight Wall Tantalum Crucible;Cap (ml), 5;Outside Dia (mm), 21;Depth (mm), 18

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