

Deposition Materials

10

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► Evaporation Materials and Sputter Targets



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Deposition Materials

■ Materials and Purity

The products listed include pure elements, compounds, alloys, intermetallics, and mixtures (elements and/or compounds mixed to the customer-specified atomic-weight percentages).

A film's purity depends, in part, on the starting material's purity.

Additional contamination may arise from reaction with air, particle transfer during handling or mounting, residual vapors in the vacuum system, and cross-contamination from other deposition sources. However, no degree of system or handling cleanliness can reduce a film's contamination due to original material purity.

NOTE: Only the most frequently ordered purities are listed here. If other purity levels are needed, contact the Sales Department.

Some reactive materials are shipped in a light mineral oil coating. It is important to follow a correct cleaning protocol to remove this oil. If the instructions become detached from the material, or were not provided, contact the Sales Department.

Deposition Techniques

For more information on thermal evaporation and sputtering techniques of materials, see Section 17 for the Materials Deposition Table.

Contact Information

For inquiries regarding pure materials as sputter targets or evaporation pieces, please contact KJLC's Sales Department:

Phone: 412-387-9200

Fax: 412-384-2745

Email: sales@lesker.com

Web: www.lesker.com

Visit our website for an online quotation at www.lesker.com/MaterialsQuotation.cfm

Pricing

- Every effort is made to display correct prices. Wherever possible, we honor the listed price even if the current price is higher. We reserve the right to adjust prices, without notice, even after the material has been ordered.
- For materials with daily price fluctuations, we indicate "Call" in the price block.

Please see page 18-62 for special Term & Conditions that apply to Material purchases.



■ **TORUS® Targets**

Targets for most TORUS sputter sources are simple disc shapes of constant thickness, listed by their material and diameter. Some older, large-diameter TORUS designs require targets that are disc-shaped annuluses.

Bonded targets are thin discs of pure material bonded to an OFHC copper backing plate. Bonded targets are used to reduce target costs in initial deposition tests, particularly for the more expensive materials.

KJLC's Materials Department provides the bonding service or the material discs separately for customers who prefer to provide their own backing plates or bond the target themselves.

Bonded targets are also used in high-power applications where the thinner target offers less thermal resistance and the conductivity of the copper improves conduction to the source's cooling well.

Because the range of possible target shapes and sizes is so vast, we list only discs of uniform thickness. If you don't see a size, shape, or material listed to suit your OEM sputter sources, please contact KJLC's Sales Department.

TORUS® Sputter Source Target Sizing Chart

TORUS Source Model	Target Diameter
TORUS 1 (Model TRS1)	1"
TORUS 2 (Models TRS2 & TMO2)	2"
TORUS 3 (Models TRS3 & TMO3)	3"
TORUS 4 (Model TRS4)	4"
TORUS 6 (Model TRS6)	6"
TORUS 7 (Model TMO7)	7"
TORUS 10	6 ⁷ / ₈ "

■ **OEM Targets**

The range of target shapes and dimensions used by OEM sputter sources is too large to list every variant. Only disc shapes are shown, but custom sizes, shapes, or profiles for almost any OEM source are available.

Contact the Sales Department for details.

■ **Evaporation Materials**

Evaporation materials are listed by material and shape, e.g., Al Canes, Al Clips, Al Pellets. For materials and shapes other than those listed, contact the Sales Department.



**KJLC® Materials Department
ISO Certified**

Our Materials Department is proud to be ISO 9001 certified. We adhere to the ISO 9001:2008 set of standards required for quality management in business-to-business dealings. These ISO requirements are centered around enhancing customer satisfaction by meeting both customer and regulatory requirements while continually improving performance.

Through ISO Certification, our Materials Department is better able to serve our thermal evaporation and magnetron sputtering customers' needs. Our precision inventory management system and strict packaging requirements ensures your order arrives on time, and ready for your R&D or production vacuum process application. We provide Material Certification Data Sheets to our customers with each order, so you can feel confident ordering precious metals, alloys, and compounds from us knowing you'll receive the exact purity and elemental composition you desire.

See for yourself why our ISO Certified Materials Department should be your primary supplier of materials for deposition.



Descriptions and Terms

Bond — Bonding is recommended for these materials. Many materials have characteristics which are not amenable to sputtering, such as brittleness and low thermal conductivity. Please reference www.lesker.com or the KJLC catalogue for additional information on bonding.

Density — Some materials and manufacturing methods may yield product with lower than average densities. Lower than average densities will affect performance according to process requirements.

Magnetic — Ferromagnetic materials require additional consideration when selecting configuration/thickness. High strength magnets or thinner targets may be required. Bonding these materials creates additional concerns due to the increase in distance from the magnets. Contact your magnetron sputter cathode supplier or reference your equipment manual for additional information.

May be packaged in oil — Due the highly reactive nature of these materials, packaging in oil is required to reduce the opportunity for oxidation or other reaction. Please reference www.lesker.com for the recommended cleaning procedure.

Porosity — Some materials and manufacturing methods may yield product with higher than average porosity. Performance may be affected according to process requirements.

Surface imperfections — Some materials and manufacturing methods may yield product with surface imperfections. In many cases, these imperfections are merely visual defects. Performance may be affected according to process requirements.

TREM — Purity for these materials is calculated accounting for Trace Rare Earth Metals. Non-rare earth elements may be excluded from the total purity calculation.

➤ Aluminum & Aluminum Alloy

IN THIS SECTION ➤ R&D Sputter Targets

- Because the range of possible target shapes and sizes is so vast, we list only discs of uniform thickness in this section. If you don't see a size, shape, or material listed to suit your **OEM** sputter sources, please contact KJLC's Materials Division at materials@lesker.com or fax **412-384-2573** with your requests.
- Every effort is made to display correct prices. Wherever possible, we honor the listed price even if the current price is higher. We reserve the right to adjust prices, without notice, even after the material has been ordered.
- For materials having large daily price fluctuations, we indicate "Call" in the price block.
- For our TORUS® Sputter Source Targets, this sizing chart is common to each product in the section.

TORUS® Sputter Source Target Sizing Chart

TORUS Source Model	Target Diameter
TORUS 1 (Model TRS1)	1"
TORUS 2 (Models TRS2 & TMO2)	2"
TORUS 3 (Models TRS3 & TMO3)	3"
TORUS 4 (Model TRS4)	4"
TORUS 6 (Model TRS6)	6"
TORUS 7 (Model TMO7)	7"
TORUS 10	6 ³ / ₈ "

■ Aluminum, Al



Aluminum, Al

Size	Aluminum, Al (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTALXX501A2			Call
1.00" Diameter x 0.250" Thickness	EJTALXX501A4	•		Call
2.00" Diameter x 0.125" Thickness	EJTALXX502A2	•		Call
2.00" Diameter x 0.250" Thickness	EJTALXX502A4	•		Call
3.00" Diameter x 0.125" Thickness	EJTALXX503A2	•		Call
3.00" Diameter x 0.250" Thickness	EJTALXX503A4	•		Call
4.00" Diameter x 0.125" Thickness	EJTALXX504A2			Call
4.00" Diameter x 0.250" Thickness	EJTALXX504A4	•		Call
6.00" Diameter x 0.125" Thickness	EJTALXX506A2			Call
6.00" Diameter x 0.250" Thickness	EJTALXX506A4			Call
8.00" Diameter x 0.125" Thickness	EJTALXX508A2			Call
8.00" Diameter x 0.250" Thickness	EJTALXX508A4			Call
Aluminum, Al (99.99% Purity)				
1.00" Diameter x 0.125" Thickness	EJTALXX401A2			Call
1.00" Diameter x 0.250" Thickness	EJTALXX401A4			Call
2.00" Diameter x 0.125" Thickness	EJTALXX402A2	•		Call
2.00" Diameter x 0.250" Thickness	EJTALXX402A4	•		Call
3.00" Diameter x 0.125" Thickness	EJTALXX403A2	•		Call
3.00" Diameter x 0.250" Thickness	EJTALXX403A4	•		Call
4.00" Diameter x 0.125" Thickness	EJTALXX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTALXX404A4			Call
6.00" Diameter x 0.125" Thickness	EJTALXX406A2			Call
6.00" Diameter x 0.250" Thickness	EJTALXX406A4			Call
8.00" Diameter x 0.125" Thickness	EJTALXX408A2			Call
8.00" Diameter x 0.250" Thickness	EJTALXX408A4	•		Call

■ Aluminum Copper, Al/Cu 99/1 wt%

Size	Al/Cu 99/1 wt% (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTALCU501A2			Call
1.00" Diameter x 0.250" Thickness	EJTALCU501A4			Call
2.00" Diameter x 0.125" Thickness	EJTALCU502A2			Call
2.00" Diameter x 0.250" Thickness	EJTALCU502A4			Call
3.00" Diameter x 0.125" Thickness	EJTALCU503A2			Call
3.00" Diameter x 0.250" Thickness	EJTALCU503A4			Call
4.00" Diameter x 0.125" Thickness	EJTALCU504A2			Call
4.00" Diameter x 0.250" Thickness	EJTALCU504A4			Call
6.00" Diameter x 0.125" Thickness	EJTALCU506A2			Call
6.00" Diameter x 0.250" Thickness	EJTALCU506A4			Call

■ Aluminum Silicon, Al/Si 99/1 wt%

Size	Al/Si 99/1 wt% (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTALSI501A2			Call
1.00" Diameter x 0.250" Thickness	EJTALSI501A4			Call
2.00" Diameter x 0.125" Thickness	EJTALSI502A2			Call
2.00" Diameter x 0.250" Thickness	EJTALSI502A4			Call
3.00" Diameter x 0.125" Thickness	EJTALSI503A2			Call
3.00" Diameter x 0.250" Thickness	EJTALSI503A4			Call
4.00" Diameter x 0.125" Thickness	EJTALSI504A2			Call
4.00" Diameter x 0.250" Thickness	EJTALSI504A4			Call



Aluminum Copper, Al/Cu 99/1 wt%



Aluminum Silicon, Al/Si 99/1 wt%

➤ Aluminum Alloys & Compounds

■ Aluminum Silicon Copper, Al/Si/Cu 98/1/1 wt%

Size	Al/Si/Cu 98/1/1 wt% (99.999% Purity)	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness		EJTALSC501A2		Call
1.00" Diameter x 0.250" Thickness		EJTALSC501A4		Call
2.00" Diameter x 0.125" Thickness		EJTALSC502A2		Call
2.00" Diameter x 0.250" Thickness		EJTALSC502A4		Call
3.00" Diameter x 0.125" Thickness		EJTALSC503A2		Call
3.00" Diameter x 0.250" Thickness		EJTALSC503A4		Call
4.00" Diameter x 0.125" Thickness		EJTALSC504A2		Call
4.00" Diameter x 0.250" Thickness		EJTALSC504A4		Call

■ Aluminum Nitride, AlN (Bond)

Size	Aluminum Nitride, AlN (99.8% Purity)	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness		EJTALNX281A2		Call
1.00" Diameter x 0.250" Thickness		EJTALNX281A4		Call
2.00" Diameter x 0.125" Thickness		EJTALNX282A2		Call
2.00" Diameter x 0.250" Thickness		EJTALNX282A4		Call
3.00" Diameter x 0.125" Thickness		EJTALNX283A2		Call
3.00" Diameter x 0.250" Thickness		EJTALNX283A4	•	Call
4.00" Diameter x 0.125" Thickness		EJTALNX284A2		Call
4.00" Diameter x 0.250" Thickness		EJTALNX284A4		Call



Aluminum Nitride, AlN

■ Aluminum Oxide, Al₂O₃ (Bond)

Size	Aluminum Oxide, Al ₂ O ₃ (99.99% Purity)	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness		EJTALOX401A2	•	Call
1.00" Diameter x 0.250" Thickness		EJTALOX401A4	•	Call
2.00" Diameter x 0.125" Thickness		EJTALOX402A2	•	Call
2.00" Diameter x 0.250" Thickness		EJTALOX402A4	•	Call
3.00" Diameter x 0.125" Thickness		EJTALOX403A2	•	Call
3.00" Diameter x 0.250" Thickness		EJTALOX403A4	•	Call
4.00" Diameter x 0.125" Thickness		EJTALOX404A2	•	Call
4.00" Diameter x 0.250" Thickness		EJTALOX404A4		Call
6.00" Diameter x 0.125" Thickness		EJTALOX406A2		Call
6.00" Diameter x 0.250" Thickness		EJTALOX406A4		Call
8.00" Diameter x 0.125" Thickness		EJTALOX408A2		Call
8.00" Diameter x 0.250" Thickness		EJTALOX408A4		Call



Aluminum Oxide, Al₂O₃

1980

Personal Computer

Bill Gates, Paul Allen and Kay Nishi make the final decision to accept the IBM® contract to produce languages and an operating system for the new microcomputer.

Kurt J. Lesker Company became the exclusive distributor for Vacuum Generators in the United States. Vacuum Generators offered a complete line of sample manipulation and UHV Components.

➤ Antimony, Antimony Telluride, Barium & Barium Compounds

■ Antimony, Sb (Porosity, Surface Imperfections)

Size	Antimony, Sb (99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTSBXX501A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTSBXX501A4		Call
2.00" Diameter x 0.125" Thickness	EJTSBXX502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTSBXX502A4		Call
3.00" Diameter x 0.125" Thickness	EJTSBXX503A2		Call
3.00" Diameter x 0.250" Thickness	EJTSBXX503A4	•	Call

■ Antimony Telluride, Sb₂Te₃ (Bond)

Size	Antimony Telluride, Sb ₂ Te ₃ (99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTSBTE501A2		Call
1.00" Diameter x 0.250" Thickness	EJTSBTE501A4		Call
2.00" Diameter x 0.125" Thickness	EJTSBTE502A2		Call
2.00" Diameter x 0.250" Thickness	EJTSBTE502A4		Call
3.00" Diameter x 0.125" Thickness	EJTSBTE503A2		Call
3.00" Diameter x 0.250" Thickness	EJTSBTE503A4		Call
4.00" Diameter x 0.125" Thickness	EJTSBTE504A2		Call
4.00" Diameter x 0.250" Thickness	EJTSBTE504A4		Call

■ Barium, Ba (May be packed in oil)

Size	Barium, Ba (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTBAXX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTBAXX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTBAXX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTBAXX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTBAXX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTBAXX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTBAXX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTBAXX254A4		Call

■ Barium Ferrite, BaFe₁₂O₁₉ (Bond)

Size	Barium Ferrite, BaFe ₁₂ O ₁₉ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTBAFE301A2		Call
1.00" Diameter x 0.250" Thickness	EJTBAFE301A4		Call
2.00" Diameter x 0.125" Thickness	EJTBAFE302A2		Call
2.00" Diameter x 0.250" Thickness	EJTBAFE302A4		Call
3.00" Diameter x 0.125" Thickness	EJTBAFE303A2		Call
3.00" Diameter x 0.250" Thickness	EJTBAFE303A4		Call
4.00" Diameter x 0.125" Thickness	EJTBAFE304A2		Call
4.00" Diameter x 0.250" Thickness	EJTBAFE304A4		Call

■ Barium Titanate, BaTiO₃ (Bond)

Size	Barium Titanate, BaTiO ₃ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTBATIO31A2		Call
1.00" Diameter x 0.250" Thickness	EJTBATIO31A4		Call
2.00" Diameter x 0.125" Thickness	EJTBATIO32A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTBATIO32A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTBATIO33A2		Call
3.00" Diameter x 0.250" Thickness	EJTBATIO33A4		Call
4.00" Diameter x 0.125" Thickness	EJTBATIO34A2		Call
4.00" Diameter x 0.250" Thickness	EJTBATIO34A4		Call




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Deposition Materials

► Barium Compounds & Bismuth

■ Barium Fluoride, BaF₂ (Bond)

Size	Barium Fluoride, BaF ₂ (99.9% Purity) Part No.	Stocked Item	Price
2.00" Diameter x 0.125" Thickness	EJTBAFX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTBAFX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTBAFX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTBAFX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTBAFX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTBAFX304A4		Call
5.00" Diameter x 0.125" Thickness	EJTBAFX305A2		Call
5.00" Diameter x 0.250" Thickness	EJTBAFX305A4		Call
6.00" Diameter x 0.125" Thickness	EJTBAFX306A2		Call
6.00" Diameter x 0.250" Thickness	EJTBAFX306A4		Call
8.00" Diameter x 0.125" Thickness	EJTBAFX308A2		Call
8.00" Diameter x 0.250" Thickness	EJTBAFX308A4		Call

■ Barium Strontium Titanate, Ba_{0.5}Sr_{0.5}TiO₃ (Bond)

Size	Barium Strontium Titanate, Ba _{0.5} Sr _{0.5} TiO ₃ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTBSTO301A2		Call
1.00" Diameter x 0.250" Thickness	EJTBSTO301A4		Call
2.00" Diameter x 0.125" Thickness	EJTBSTO302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTBSTO302A4		Call
3.00" Diameter x 0.125" Thickness	EJTBSTO303A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTBSTO303A4		Call
4.00" Diameter x 0.125" Thickness	EJTBSTO304A2		Call
4.00" Diameter x 0.250" Thickness	EJTBSTO304A4		Call

* Other compositions are available on request.



Barium Strontium Titanate, Ba_{0.5}Sr_{0.5}TiO₃

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Deposition Materials

■ Bismuth, Bi (Porosity, Surface Imperfections)

Size	Bismuth, Bi (99.9%-99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTBIFEO31A2		Call
1.00" Diameter x 0.125" Thickness	EJTBIFEO31A4	•	Call
2.0" Diameter x 0.125" Thickness	EJTBIFEO31A2		Call
2.0" Diameter x 0.125" Thickness	EJTBIFEO32A2	•	Call
3.00" Diameter x 0.125" Thickness	EJTBIFEO32A4		Call
3.00" Diameter x 0.125" Thickness	EJTBIFEO33A2		Call
1.00" Diameter x 0.125" Thickness	EJTBIXX503A4	•	Call
1.00" Diameter x 0.250" Thickness	EJTBIXX501A4		Call
2.0" Diameter x 0.125" Thickness	EJTBIXX502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTBIXX502A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTBIXX503A2		Call
3.00" Diameter x 0.250" Thickness	EJTBIXX503A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTBIXX504A2		Call
4.00" Diameter x 0.250" Thickness	EJTBIXX504A4		Call



Bismuth, Bi

► Bismuth Compounds

■ Bismuth Oxide, Bi_2O_3 (Bond)

Size	Bismuth Oxide, Bi_2O_3 (99.99% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTBIOX501A2		Call
1.00" Diameter x 0.250" Thickness		EJTBIOX501A4		Call
2.00" Diameter x 0.125" Thickness		EJTBIOX502A2		Call
2.00" Diameter x 0.250" Thickness		EJTBIOX502A4		Call
3.00" Diameter x 0.125" Thickness		EJTBIOX503A2		Call
3.00" Diameter x 0.250" Thickness		EJTBIOX503A4		Call
4.00" Diameter x 0.125" Thickness		EJTBIOX504A2		Call
4.00" Diameter x 0.250" Thickness		EJTBIOX504A4		Call

■ Bismuth Selenide, Bi_2Se_3 (Bond)

Size	Bismuth Selenide, Bi_2Se_3 (99.999% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTBISE501A2		Call
1.00" Diameter x 0.250" Thickness		EJTBISE501A4		Call
2.00" Diameter x 0.125" Thickness		EJTBISE502A2		Call
2.00" Diameter x 0.250" Thickness		EJTBISE502A4		Call
3.00" Diameter x 0.125" Thickness		EJTBISE503A2		Call
3.00" Diameter x 0.250" Thickness		EJTBISE503A4		Call
4.00" Diameter x 0.125" Thickness		EJTBISE504A2		Call
4.00" Diameter x 0.250" Thickness		EJTBISE504A4		Call

■ Bismuth Telluride, Bi_2Te_3 (Bond)

Size	Bismuth Telluride, Bi_2Te_3 (99.999% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTBITE501A2		Call
1.00" Diameter x 0.250" Thickness		EJTBITE501A4		Call
2.00" Diameter x 0.125" Thickness		EJTBITE502A2		Call
2.00" Diameter x 0.250" Thickness		EJTBITE502A4		Call
3.00" Diameter x 0.125" Thickness		EJTBITE503A2		Call
3.00" Diameter x 0.250" Thickness		EJTBITE503A4		Call
4.00" Diameter x 0.125" Thickness		EJTBITE504A2		Call
4.00" Diameter x 0.250" Thickness		EJTBITE504A4		Call
6.00" Diameter x 0.250" Thickness		EJTBITE506A4		Call
8.00" Diameter x 0.250" Thickness		EJTBITE508A4		Call

■ Bismuth Titanate, $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ (Bond)

Size	Bismuth Titanate, $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ (99.9% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTBITO301A2		Call
1.00" Diameter x 0.250" Thickness		EJTBITO301A4		Call
2.00" Diameter x 0.125" Thickness		EJTBITO302A2		Call
2.00" Diameter x 0.250" Thickness		EJTBITO302A4		Call
3.00" Diameter x 0.125" Thickness		EJTBITO303A2		Call
3.00" Diameter x 0.250" Thickness		EJTBITO303A4		Call
4.00" Diameter x 0.125" Thickness		EJTBITO304A2		Call
4.00" Diameter x 0.250" Thickness		EJTBITO304A4		Call

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PUMP EXCHANGE PROGRAM



Cryo Turbo Rotary Vane
Scroll Rotary Piston Ion
Diffusion Screw Blower
Dry Process

VISIT WWW.LESKER.COM/REMAN
FOR UP TO DATE INVENTORY

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Deposition Materials

► Boron & Compounds

■ Boron, B (Bond, Density 60-80%)

Size	Boron, B (99.5% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTBXXX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTBXXX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTBXXX252A2			Call
2.00" Diameter x 0.250" Thickness	EJTBXXX252A4			Call
3.00" Diameter x 0.125" Thickness	EJTBXXX253A2			Call
3.00" Diameter x 0.250" Thickness	EJTBXXX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTBXXX254A2			Call
4.00" Diameter x 0.250" Thickness	EJTBXXX254A4			Call
6.00" Diameter x 0.250" Thickness	EJTBXXX256A4			Call
8.00" Diameter x 0.250" Thickness	EJTBXXX258A4			Call



Boron, B

■ Boron Nitride, BN (Bond)

Size	Boron Nitride, BN (99.99% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTBNXX401A2			Call
1.00" Diameter x 0.250" Thickness	EJTBNXX401A4			Call
2.00" Diameter x 0.125" Thickness	EJTBNXX402A2			Call
2.00" Diameter x 0.250" Thickness	EJTBNXX402A4			Call
3.00" Diameter x 0.125" Thickness	EJTBNXX403A2			Call
3.00" Diameter x 0.250" Thickness	EJTBNXX403A4			Call
4.00" Diameter x 0.125" Thickness	EJTBNXX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTBNXX404A4			Call
6.00" Diameter x 0.125" Thickness	EJTBNXX406A2			Call
6.00" Diameter x 0.250" Thickness	EJTBNXX406A4			Call
8.00" Diameter x 0.125" Thickness	EJTBNXX408A2			Call
8.00" Diameter x 0.250" Thickness	EJTBNXX408A4			Call



Boron Nitride, BN

Size	Boron Nitride, BN (99.5% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTBNXX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTBNXX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTBNXX252A2	•		Call
2.00" Diameter x 0.250" Thickness	EJTBNXX252A4	•		Call
3.00" Diameter x 0.125" Thickness	EJTBNXX253A2	•		Call
3.00" Diameter x 0.250" Thickness	EJTBNXX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTBNXX254A2			Call
4.00" Diameter x 0.250" Thickness	EJTBNXX254A4			Call
6.00" Diameter x 0.125" Thickness	EJTBNXX256A2			Call
6.00" Diameter x 0.250" Thickness	EJTBNXX256A4			Call
8.00" Diameter x 0.125" Thickness	EJTBNXX258A2			Call
8.00" Diameter x 0.250" Thickness	EJTBNXX258A4			Call

■ Boron Carbide, B₄C (Bond)

Size	Boron Carbide, B ₄ C (99.5% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTBCXX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTBCXX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTBCXX252A2	•		Call
2.00" Diameter x 0.250" Thickness	EJTBCXX252A4			Call
3.00" Diameter x 0.125" Thickness	EJTBCXX253A2			Call
3.00" Diameter x 0.250" Thickness	EJTBCXX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTBCXX254A2	•		Call
4.00" Diameter x 0.250" Thickness	EJTBCXX254A4			Call
6.00" Diameter x 0.125" Thickness	EJTBCXX256A2			Call
6.00" Diameter x 0.250" Thickness	EJTBCXX256A4			Call
8.00" Diameter x 0.125" Thickness	EJTBCXX258A2			Call
8.00" Diameter x 0.250" Thickness	EJTBCXX258A4			Call



Boron Carbide, B₄C

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Deposition Materials

➤ Cadmium & Compounds

■ Cadmium, Cd (Porosity, Surface Imperfections)

Size	Cadmium, Cd (99.999% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTCDX501A2	•	Call
1.00" Diameter x 0.250" Thickness		EJTCDX501A4		Call
2.00" Diameter x 0.125" Thickness		EJTCDX502A2		Call
2.00" Diameter x 0.250" Thickness		EJTCDX502A4		Call
3.00" Diameter x 0.125" Thickness		EJTCDX503A2		Call
3.00" Diameter x 0.250" Thickness		EJTCDX503A4		Call
4.00" Diameter x 0.125" Thickness		EJTCDX504A2		Call
4.00" Diameter x 0.250" Thickness		EJTCDX504A4		Call

■ Cadmium Selenide, CdSe (Bond)

Size	Cadmium Selenide, CdSe (99.995% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTCDE451A2		Call
1.00" Diameter x 0.250" Thickness		EJTCDE451A4		Call
2.00" Diameter x 0.125" Thickness		EJTCDE452A2		Call
2.00" Diameter x 0.250" Thickness		EJTCDE452A4		Call
3.00" Diameter x 0.125" Thickness		EJTCDE453A2		Call
3.00" Diameter x 0.250" Thickness		EJTCDE453A4		Call
4.00" Diameter x 0.125" Thickness		EJTCDE454A2		Call
4.00" Diameter x 0.250" Thickness		EJTCDE454A4		Call

■ Cadmium Sulfide, CdS (Bond)

Size	Cadmium Sulfide, CdS (99.99% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTCDSX401A2		Call
1.00" Diameter x 0.250" Thickness		EJTCDSX401A4		Call
2.00" Diameter x 0.125" Thickness		EJTCDSX402A2		Call
2.00" Diameter x 0.250" Thickness		EJTCDSX402A4		Call
3.00" Diameter x 0.125" Thickness		EJTCDSX403A2		Call
3.00" Diameter x 0.250" Thickness		EJTCDSX403A4		Call
4.00" Diameter x 0.125" Thickness		EJTCDSX404A2		Call
4.00" Diameter x 0.250" Thickness		EJTCDSX404A4		Call

■ Cadmium Telluride, CdTe (Bond)

Size	Cadmium Telluride, CdTe (99.999% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTCDE501A2		Call
1.00" Diameter x 0.250" Thickness		EJTCDE501A4		Call
2.00" Diameter x 0.125" Thickness		EJTCDE502A2		Call
2.00" Diameter x 0.250" Thickness		EJTCDE502A4		Call
3.00" Diameter x 0.125" Thickness		EJTCDE503A2		Call
3.00" Diameter x 0.250" Thickness		EJTCDE503A4		Call
4.00" Diameter x 0.125" Thickness		EJTCDE504A2		Call
4.00" Diameter x 0.250" Thickness		EJTCDE504A4		Call



Cadmium Telluride, CdTe

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Deposition Materials

➤ Carbon, Cerium & Cerium Compounds

■ Carbon (Graphite), C (Bond)

Size	Carbon (Graphite), C (99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCXXX501A2		Call
1.00" Diameter x 0.250" Thickness	EJTCXXX501A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTCXXX502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCXXX502A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTCXXX503A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTCXXX503A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTCXXX504A2		Call
4.00" Diameter x 0.250" Thickness	EJTCXXX504A4		Call
6.00" Diameter x 0.250" Thickness	EJTCXXX506A4		Call
8.00" Diameter x 0.250" Thickness	EJTCXXX508A4		Call

■ Carbon (Pyrolytic Graphite), C (Bond)

Size	Carbon (Graphite, Pyrolytic), C (99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTPYRO501A2		Call
1.00" Diameter x 0.250" Thickness	EJTPYRO501A4		Call
2.00" Diameter x 0.125" Thickness	EJTPYRO502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTPYRO502A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTPYRO503A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTPYRO503A4		Call
4.00" Diameter x 0.125" Thickness	EJTPYRO504A2		Call
4.00" Diameter x 0.250" Thickness	EJTPYRO504A4		Call
6.00" Diameter x 0.250" Thickness	EJTPYRO506A4		Call

■ Cerium, Ce (May Be Packed In Oil)

Size	Cerium, Ce (99.9% Purity TREM) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCEXX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTCEXX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTCEXX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTCEXX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTCEXX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTCEXX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTCEXX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTCEXX304A4		Call

■ Cerium Fluoride, CeF₃ (Bond)

Size	Cerium Fluoride, CeF ₃ (99.995% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCEFX451A2		Call
1.00" Diameter x 0.250" Thickness	EJTCEFX451A4		Call
2.00" Diameter x 0.125" Thickness	EJTCEFX452A2		Call
2.00" Diameter x 0.250" Thickness	EJTCEFX452A4		Call
3.00" Diameter x 0.125" Thickness	EJTCEFX453A2		Call
3.00" Diameter x 0.250" Thickness	EJTCEFX453A4		Call
4.00" Diameter x 0.125" Thickness	EJTCEFX454A2		Call
4.00" Diameter x 0.250" Thickness	EJTCEFX454A4		Call
6.00" Diameter x 0.125" Thickness	EJTCEFX456A2		Call
6.00" Diameter x 0.250" Thickness	EJTCEFX456A4		Call
8.00" Diameter x 0.125" Thickness	EJTCEFX458A2		Call
8.00" Diameter x 0.250" Thickness	EJTCEFX458A4		Call

■ Cerium Oxide, CeO₂ (Bond)

Size	Cerium Oxide, CeO ₂ (99.99% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCEOX401A2		Call
1.00" Diameter x 0.250" Thickness	EJTCEOX401A4		Call
2.00" Diameter x 0.125" Thickness	EJTCEOX402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCEOX402A4		Call
3.00" Diameter x 0.125" Thickness	EJTCEOX403A2		Call
3.00" Diameter x 0.250" Thickness	EJTCEOX403A4		Call
4.00" Diameter x 0.125" Thickness	EJTCEOX404A2		Call
4.00" Diameter x 0.250" Thickness	EJTCEOX404A4		Call



Carbon (Graphite), C



Cerium Oxide, CeO₂

► Chromium, Chromium Compounds & Cobalt



Chromium, Cr

■ Chromium, Cr

Size	Chromium, Cr (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCRXX351A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTCRXX351A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTCRXX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCRXX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTCRXX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTCRXX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTCRXX354A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTCRXX354A4	•	Call
6.00" Diameter x 0.125" Thickness	EJTCRXX356A2	•	Call
6.00" Diameter x 0.250" Thickness	EJTCRXX356A4	•	Call
8.00" Diameter x 0.125" Thickness	EJTCRXX358A2	•	Call
8.00" Diameter x 0.250" Thickness	EJTCRXX358A4	•	Call

Chromium Oxide, Cr₂O₃

■ Chromium Oxide, Cr₂O₃ (Bond)

Size	Chromium Oxide, Cr ₂ O ₃ (99.8%-99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCROX281A2		Call
1.00" Diameter x 0.250" Thickness	EJTCROX281A4		Call
2.00" Diameter x 0.125" Thickness	EJTCROX282A2		Call
2.00" Diameter x 0.250" Thickness	EJTCROX282A4		Call
3.00" Diameter x 0.125" Thickness	EJTCROX283A2		Call
3.00" Diameter x 0.250" Thickness	EJTCROX283A4		Call
4.00" Diameter x 0.125" Thickness	EJTCROX284A2		Call
4.00" Diameter x 0.250" Thickness	EJTCROX284A4		Call

■ Chromium Silicide, CrSi₂ (Bond)

Size	Chromium Silicide, CrSi ₂ (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCRSI251A2		Call
1.00" Diameter x 0.250" Thickness	EJTCRSI251A4		Call
2.00" Diameter x 0.125" Thickness	EJTCRSI252A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCRSI252A4		Call
3.00" Diameter x 0.125" Thickness	EJTCRSI253A2		Call
3.00" Diameter x 0.250" Thickness	EJTCRSI253A4		Call
4.00" Diameter x 0.125" Thickness	EJTCRSI254A2		Call
4.00" Diameter x 0.250" Thickness	EJTCRSI254A4		Call
6.00" Diameter x 0.125" Thickness	EJTCRSI256A2		Call
6.00" Diameter x 0.250" Thickness	EJTCRSI256A4		Call
8.00" Diameter x 0.125" Thickness	EJTCRSI258A2		Call
8.00" Diameter x 0.250" Thickness	EJTCRSI258A4		Call

■ Cobalt, Co (Magnetic)

Size	Cobalt, Co (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCOXX351A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTCOXX351A4		Call
2.00" Diameter x 0.125" Thickness	EJTCOXX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCOXX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTCOXX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTCOXX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTCOXX354A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTCOXX354A4		Call
6.00" Diameter x 0.125" Thickness	EJTCOXX356A2		Call
6.00" Diameter x 0.250" Thickness	EJTCOXX356A4		Call
8.00" Diameter x 0.125" Thickness	EJTCOXX358A2		Call
8.00" Diameter x 0.250" Thickness	EJTCOXX358A4		Call



Cobalt, Co

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Deposition Materials

➤ Cobalt Oxide, Copper & Copper Oxide

■ Cobalt Oxide, CoO (Bond)

Cobalt Oxide, CoO (99.9% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCOOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTCOOX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTCOOX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTCOOX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTCOOX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTCOOX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTCOOX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTCOOX304A4		Call

Cobalt Oxide, CoO (99.95% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCOOX351A2		Call
1.00" Diameter x 0.250" Thickness	EJTCOOX351A4		Call
2.00" Diameter x 0.125" Thickness	EJTCOOX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCOOX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTCOOX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTCOOX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTCOOX354A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTCOOX354A4		Call

■ Copper, Cu

Copper, Cu (99.999% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCUXX501A2		Call
1.00" Diameter x 0.250" Thickness	EJTCUXX501A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTCUXX502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCUXX502A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTCUXX503A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTCUXX503A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTCUXX504A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTCUXX504A4	•	Call
6.00" Diameter x 0.125" Thickness	EJTCUXX506A2		Call
6.00" Diameter x 0.250" Thickness	EJTCUXX506A4		Call
8.00" Diameter x 0.125" Thickness	EJTCUXX508A2		Call
8.00" Diameter x 0.250" Thickness	EJTCUXX508A4		Call

Copper, Cu (99.99% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTCUXX401A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTCUXX401A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTCUXX402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTCUXX402A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTCUXX403A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTCUXX403A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTCUXX404A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTCUXX404A4	•	Call
6.00" Diameter x 0.125" Thickness	EJTCUXX406A2		Call
6.00" Diameter x 0.250" Thickness	EJTCUXX406A4	•	Call
8.00" Diameter x 0.250" Thickness	EJTCUXX408A4	•	Call

■ Copper Oxide, CuO (Bond)

Copper Oxide, CuO (99.7%-99.9% Purity)			
Size	Part No.	Stocked Item	Price
1.0" Diameter x 0.125" Thickness	EJTCUOX271A2		Call
1.0" Diameter x 0.250" Thickness	EJTCUOX271A4		Call
2.0" Diameter x 0.125" Thickness	EJTCUOX272A2	•	Call
2.0" Diameter x 0.250" Thickness	EJTCUOX272A4	•	Call
3.0" Diameter x 0.125" Thickness	EJTCUOX273A2		Call
3.0" Diameter x 0.250" Thickness	EJTCUOX273A4		Call
4.0" Diameter x 0.125" Thickness	EJTCUOX274A2		Call
4.0" Diameter x 0.250" Thickness	EJTCUOX274A4		Call



Copper, Cu



Copper Oxide, CuO

► Dysprosium, Erbium & Europium

■ Dysprosium, Dy (May Be Packed In Oil)

Size	Dysprosium, Dy (99.9% Purity TREM)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTDYXX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTDYXX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTDYXX302A2			Call
2.00" Diameter x 0.250" Thickness	EJTDYXX302A4			Call
3.00" Diameter x 0.125" Thickness	EJTDYXX303A2			Call
3.00" Diameter x 0.250" Thickness	EJTDYXX303A4			Call
4.00" Diameter x 0.125" Thickness	EJTDYXX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTDYXX304A4			Call

■ Erbium, Er (May Be Packed In Oil)

Size	Erbium, Er (99.9% Purity TREM)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTERXX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTERXX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTERXX302A2			Call
2.00" Diameter x 0.250" Thickness	EJTERXX302A4			Call
3.00" Diameter x 0.125" Thickness	EJTERXX303A2			Call
3.00" Diameter x 0.250" Thickness	EJTERXX303A4			Call
4.00" Diameter x 0.125" Thickness	EJTERXX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTERXX304A4			Call

■ Europium, Eu (May Be Packed In Oil)

Size	Europium, Eu (99.9% Purity TREM)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTEUXX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTEUXX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTEUXX302A2			Call
2.00" Diameter x 0.250" Thickness	EJTEUXX302A4			Call
3.00" Diameter x 0.125" Thickness	EJTEUXX303A2			Call
3.00" Diameter x 0.250" Thickness	EJTEUXX303A4			Call
4.00" Diameter x 0.125" Thickness	EJTEUXX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTEUXX304A4			Call
6.00" Diameter x 0.125" Thickness	EJTEUXX306A2			Call
6.00" Diameter x 0.250" Thickness	EJTEUXX306A4			Call
8.00" Diameter x 0.125" Thickness	EJTEUXX308A2			Call
8.00" Diameter x 0.250" Thickness	EJTEUXX308A4			Call



• Quality Products & Services
 • On-time Delivery
 • Continual Improvement
 • Effective Employee Training
 • Customer Satisfaction



Providing Quality You Can Trust for Over 55 Years!

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Deposition Materials

➤ Gadolinium, Germanium & Gold

■ Gadolinium, Gd (Magnetic, May Be Packed In Oil)

Size	Gadolinium, Gd (99.9% Purity TREM)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTGDX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTGDX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTGDX302A2			Call
2.00" Diameter x 0.250" Thickness	EJTGDX302A4			Call
3.00" Diameter x 0.125" Thickness	EJTGDX303A2			Call
3.00" Diameter x 0.250" Thickness	EJTGDX303A4			Call
4.00" Diameter x 0.125" Thickness	EJTGDX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTGDX304A4			Call



Gadolinium, Gd

■ Germanium, Ge, (N-Type, 5-40 Ohm-cm) (Bond)

Size	Germanium, Ge (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTGEX501A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTGEX501A4			Call
2.00" Diameter x 0.125" Thickness	EJTGEX502A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTGEX502A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTGEX503A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTGEX503A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTGEX504A2		•	Call
4.00" Diameter x 0.250" Thickness	EJTGEX504A4			Call



Germanium, Ge

■ Gold, Au

Size	Gold, Au (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.063" Thickness	EJTAUX501A1			Call
1.00" Diameter x 0.125" Thickness	EJTAUX501A2			Call
1.00" Diameter x 0.250" Thickness	EJTAUX501A4			Call
2.00" Diameter x 0.063" Thickness	EJTAUX502A1			Call
2.00" Diameter x 0.125" Thickness	EJTAUX502A2			Call
2.00" Diameter x 0.250" Thickness	EJTAUX502A4			Call
3.00" Diameter x 0.063" Thickness	EJTAUX503A1			Call
3.00" Diameter x 0.125" Thickness	EJTAUX503A2			Call
3.00" Diameter x 0.250" Thickness	EJTAUX503A4			Call
4.00" Diameter x 0.125" Thickness	EJTAUX504A2			Call
4.00" Diameter x 0.250" Thickness	EJTAUX504A4			Call
5.00" Diameter x 0.250" Thickness	EJTAUX505A4			Call
6.00" Diameter x 0.250" Thickness	EJTAUX506A4			Call
8.00" Diameter x 0.250" Thickness	EJTAUX508A4			Call
Gold, Au (99.99% Purity)				
1.00" Diameter x 0.063" Thickness	EJTAUX401A1		•	Call
1.00" Diameter x 0.125" Thickness	EJTAUX401A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTAUX401A4			Call
2.00" Diameter x 0.063" Thickness	EJTAUX402A1		•	Call
2.00" Diameter x 0.125" Thickness	EJTAUX402A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTAUX402A4			Call
3.00" Diameter x 0.063" Thickness	EJTAUX403A1		•	Call
3.00" Diameter x 0.125" Thickness	EJTAUX403A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTAUX403A4			Call
4.00" Diameter x 0.125" Thickness	EJTAUX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTAUX404A4			Call
6.00" Diameter x 0.250" Thickness	EJTAUX406A4			Call
8.00" Diameter x 0.250" Thickness	EJTAUX408A4			Call



Gold, Au

NOTE: We offer reclaim on spent targets, crucibles, and boats.

➤ Hafnium & Compounds



Hafnium, Hf

■ Hafnium, Hf

Size	Hafnium, Hf (99.9% Purity ex Zr)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTHFXX301A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTHFXX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTHFXX302A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTHFXX302A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTHFXX303A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTHFXX303A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTHFXX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTHFXX304A4			Call
6.00" Diameter x 0.125" Thickness	EJTHFXX306A2			Call
6.00" Diameter x 0.250" Thickness	EJTHFXX306A4			Call
8.00" Diameter x 0.125" Thickness	EJTHFXX308A2			Call
8.00" Diameter x 0.250" Thickness	EJTHFXX308A4			Call

■ Hafnium Carbide, HfC (Bond)

Size	Hafnium Carbide, HfC (99.5% Purity ex Zr)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTHFCX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTHFCX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTHFCX252A2			Call
2.00" Diameter x 0.250" Thickness	EJTHFCX252A4			Call
3.00" Diameter x 0.125" Thickness	EJTHFCX253A2			Call
3.00" Diameter x 0.250" Thickness	EJTHFCX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTHFCX254A2			Call
4.00" Diameter x 0.250" Thickness	EJTHFCX254A4			Call
6.00" Diameter x 0.125" Thickness	EJTHFCX256A2			Call
6.00" Diameter x 0.250" Thickness	EJTHFCX256A4			Call
8.00" Diameter x 0.125" Thickness	EJTHFCX258A2			Call
8.00" Diameter x 0.250" Thickness	EJTHFCX258A4			Call

■ Hafnium Nitride, HfN (Bond)

Size	Hafnium Nitride, HfN (99.5% Purity ex Zr)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTHFNX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTHFNX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTHFNX252A2			Call
2.00" Diameter x 0.250" Thickness	EJTHFNX252A4			Call
3.00" Diameter x 0.125" Thickness	EJTHFNX253A2			Call
3.00" Diameter x 0.250" Thickness	EJTHFNX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTHFNX254A2			Call
4.00" Diameter x 0.250" Thickness	EJTHFNX254A4			Call
6.00" Diameter x 0.125" Thickness	EJTHFNX256A2			Call
6.00" Diameter x 0.250" Thickness	EJTHFNX256A4			Call
8.00" Diameter x 0.125" Thickness	EJTHFNX258A2			Call
8.00" Diameter x 0.250" Thickness	EJTHFNX258A4			Call

■ Hafnium Oxide, HfO₂ (Bond)

Size	Hafnium Oxide, HfO ₂ (99.95% Purity ex. Zr)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTHFOX351A2			Call
1.00" Diameter x 0.250" Thickness	EJTHFOX351A4			Call
2.00" Diameter x 0.125" Thickness	EJTHFOX352A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTHFOX352A4			Call
3.00" Diameter x 0.125" Thickness	EJTHFOX353A2			Call
3.00" Diameter x 0.250" Thickness	EJTHFOX353A4			Call
4.00" Diameter x 0.125" Thickness	EJTHFOX354A2			Call
4.00" Diameter x 0.250" Thickness	EJTHFOX354A4			Call
6.00" Diameter x 0.250" Thickness	EJTHFOX356A4			Call

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Deposition Materials

► Holmium, Indium & Indium Compounds

■ Holmium, Ho (May Be Packed In Oil)

Size	Holmium, Ho (99.9% Purity TREM)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTHOXX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTHOXX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTHOXX302A2			Call
2.00" Diameter x 0.250" Thickness	EJTHOXX302A4			Call
3.00" Diameter x 0.125" Thickness	EJTHOXX303A2			Call
3.00" Diameter x 0.250" Thickness	EJTHOXX303A4			Call
4.00" Diameter x 0.125" Thickness	EJTHOXX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTHOXX304A4			Call

■ Indium, In

Size	Indium, In (99.998%-99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTINXX501A2			Call
1.00" Diameter x 0.250" Thickness	EJTINXX501A4			Call
2.00" Diameter x 0.125" Thickness	EJTINXX502A2	•		Call
2.00" Diameter x 0.250" Thickness	EJTINXX502A4	•		Call
3.00" Diameter x 0.125" Thickness	EJTINXX503A2	•		Call
3.00" Diameter x 0.250" Thickness	EJTINXX503A4			Call
4.00" Diameter x 0.125" Thickness	EJTINXX504A2			Call
4.00" Diameter x 0.250" Thickness	EJTINXX504A4			Call
6.00" Diameter x 0.125" Thickness	EJTINXX506A2			Call
6.00" Diameter x 0.250" Thickness	EJTINXX506A4			Call
8.00" Diameter x 0.125" Thickness	EJTINXX508A2			Call
8.00" Diameter x 0.250" Thickness	EJTINXX508A4			Call

Indium, In (99.99% Purity)				
Size	Indium, In (99.99% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTINXX401A2			Call
1.00" Diameter x 0.250" Thickness	EJTINXX401A4			Call
2.00" Diameter x 0.125" Thickness	EJTINXX402A2			Call
2.00" Diameter x 0.250" Thickness	EJTINXX402A4	•		Call
3.00" Diameter x 0.125" Thickness	EJTINXX403A2			Call
3.00" Diameter x 0.250" Thickness	EJTINXX403A4			Call
4.00" Diameter x 0.125" Thickness	EJTINXX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTINXX404A4			Call
6.00" Diameter x 0.125" Thickness	EJTINXX406A2			Call
6.00" Diameter x 0.250" Thickness	EJTINXX406A4			Call
8.00" Diameter x 0.125" Thickness	EJTINXX408A2			Call
8.00" Diameter x 0.250" Thickness	EJTINXX408A4			Call

■ Indium Oxide, In₂O₃ (Bond)

Size	Indium Oxide, In ₂ O ₃ (99.99% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTINOX401A2			Call
1.00" Diameter x 0.250" Thickness	EJTINOX401A4			Call
2.00" Diameter x 0.125" Thickness	EJTINOX402A2	•		Call
2.00" Diameter x 0.250" Thickness	EJTINOX402A4			Call
3.00" Diameter x 0.125" Thickness	EJTINOX403A2			Call
3.00" Diameter x 0.250" Thickness	EJTINOX403A4			Call
4.00" Diameter x 0.125" Thickness	EJTINOX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTINOX404A4			Call

■ Indium Tin Oxide (ITO), In₂O₃/SnO₂ 90/10 wt% (Bond)

Size	Indium Tin Oxide, "ITO" (99.99% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTITOX401A2			Call
1.00" Diameter x 0.250" Thickness	EJTITOX401A4	•		Call
2.00" Diameter x 0.125" Thickness	EJTITOX402A2	•		Call
2.00" Diameter x 0.250" Thickness	EJTITOX402A4	•		Call
3.00" Diameter x 0.125" Thickness	EJTITOX403A2	•		Call
3.00" Diameter x 0.250" Thickness	EJTITOX403A4	•		Call
4.00" Diameter x 0.125" Thickness	EJTITOX404A2	•		Call
4.00" Diameter x 0.250" Thickness	EJTITOX404A4	•		Call
6.00" Diameter x 0.125" Thickness	EJTITOX406A2			Call
6.00" Diameter x 0.250" Thickness	EJTITOX406A4	•		Call
8.00" Diameter x 0.250" Thickness	EJTITOX408A4			Call



Indium, In

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Deposition Materials



Indium Tin Oxide (ITO), In₂O₃/SnO₂ 90/10 wt%

► *Iridium & Iron*■ **Iridium, Ir** (Porosity, Surface Imperfections)

Size	Iridium (99.9% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTIRXX301A2		Call
1.00" Diameter x 0.250" Thickness		EJTIRXX301A4		Call
2.00" Diameter x 0.125" Thickness		EJTIRXX302A2		Call
2.00" Diameter x 0.250" Thickness		EJTIRXX302A4		Call
3.00" Diameter x 0.125" Thickness		EJTIRXX303A2		Call
3.00" Diameter x 0.250" Thickness		EJTIRXX303A4		Call
4.00" Diameter x 0.125" Thickness		EJTIRXX304A2		Call
4.00" Diameter x 0.250" Thickness		EJTIRXX304A4		Call

■ **Iron, Fe** (Magnetic)

Size	Iron, Fe (99.9% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.063" Thickness		EJTFEXX301A1	•	Call
1.00" Diameter x 0.125" Thickness		EJTFEXX301A2	•	Call
2.00" Diameter x 0.080" Thickness		EJTFE302A.08		Call
2.00" Diameter x 0.063" Thickness		EJTFEXX302A1	•	Call
2.00" Diameter x 0.125" Thickness		EJTFEXX302A2	•	Call
2.00" Diameter x 0.250" Thickness		EJTFEXX302A4		Call
3.00" Diameter x 0.063" Thickness		EJTFEXX303A1	•	Call
3.00" Diameter x 0.125" Thickness		EJTFEXX303A2	•	Call
3.00" Diameter x 0.250" Thickness		EJTFEXX303A4		Call
3.00" Diameter x 0.080" Thickness		EJTFE303A.08		Call
4.00" Diameter x 0.125" Thickness		EJTFEXX304A2	•	Call
4.00" Diameter x 0.250" Thickness		EJTFEXX304A4		Call
4.00" Diameter x 0.080" Thickness		EJTFE304A.08		Call

Size	Iron, Fe (99.95% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.063" Thickness		EJTFEXX351A1		Call
1.00" Diameter x 0.125" Thickness		EJTFEXX351A2		Call
2.00" Diameter x 0.080" Thickness		EJTFE352A.08		Call
2.00" Diameter x 0.063" Thickness		EJTFEXX352A1		Call
2.00" Diameter x 0.125" Thickness		EJTFEXX352A2	•	Call
2.00" Diameter x 0.250" Thickness		EJTFEXX352A4		Call
3.00" Diameter x 0.063" Thickness		EJTFEXX353A1		Call
3.00" Diameter x 0.125" Thickness		EJTFEXX353A2		Call
3.00" Diameter x 0.250" Thickness		EJTFEXX353A4		Call
3.00" Diameter x 0.080" Thickness		EJTFE353A.08	•	Call
4.00" Diameter x 0.125" Thickness		EJTFEXX354A2		Call
4.00" Diameter x 0.250" Thickness		EJTFEXX354A4		Call
4.00" Diameter x 0.080" Thickness		EJTFE354A.08		Call

Size	Iron, Fe (99.99% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.063" Thickness		EJTFEXX401A1		Call
1.00" Diameter x 0.125" Thickness		EJTFEXX401A2		Call
2.00" Diameter x 0.063" Thickness		EJTFEXX402A1		Call
2.00" Diameter x 0.125" Thickness		EJTFEXX402A2		Call
2.00" Diameter x 0.250" Thickness		EJTFEXX402A4		Call
2.00" Diameter x 0.080" Thickness		EJTFE402A.08		Call
3.00" Diameter x 0.063" Thickness		EJTFEXX403A1		Call
3.00" Diameter x 0.125" Thickness		EJTFEXX403A2		Call
3.00" Diameter x 0.250" Thickness		EJTFEXX403A4		Call
3.00" Diameter x 0.080" Thickness		EJTFE403A.08		Call
4.00" Diameter x 0.125" Thickness		EJTFEXX404A2		Call
4.00" Diameter x 0.250" Thickness		EJTFEXX404A4		Call
4.00" Diameter x 0.080" Thickness		EJTFE404A.08		Call

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Deposition Materials

➤ Iron Oxide, Lanthanum & Compounds

■ Iron Oxide, Fe₂O₃

Size	Iron Oxide, Fe ₂ O ₃ (99.99% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTFOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTFOX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTFOX302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTFOX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTFOX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTFOX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTFOX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTFOX304A4		Call



Iron Oxide, Fe₂O₃

■ Lanthanum, La (May Be Packed In Oil)

Size	Lanthanum, La (99.9% Purity TREM) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTLAXX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTLAXX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTLAXX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTLAXX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTLAXX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTLAXX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTLAXX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTLAXX304A4		Call

■ Lanthanum Aluminate, LaAlO₃ (Bond)

Size	Lanthanum Aluminate, LaAlO ₃ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTLALO301A2		Call
1.00" Diameter x 0.250" Thickness	EJTLALO301A4		Call
2.00" Diameter x 0.125" Thickness	EJTLALO302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTLALO302A4		Call
3.00" Diameter x 0.125" Thickness	EJTLALO303A2		Call
3.00" Diameter x 0.250" Thickness	EJTLALO303A4		Call
4.00" Diameter x 0.125" Thickness	EJTLALO304A2		Call
4.00" Diameter x 0.250" Thickness	EJTLALO304A4		Call

■ Lanthanum Hexaboride, LaB₆ (Bond)

Size	Lanthanum Boride, LaB ₆ (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTLABX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTLABX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTLABX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTLABX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTLABX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTLABX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTLABX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTLABX254A4		Call

➤ Lanthanum Oxide, Lead & Lead Compounds

■ Lanthanum Oxide, La_2O_3 (Cannot offer bonding services)

Size	Lanthanum Oxide, La_2O_3 (99.99% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTLAOX401A2			Call
1.00" Diameter x 0.250" Thickness	EJTLAOX401A4			Call
2.00" Diameter x 0.125" Thickness	EJTLAOX402A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTLAOX402A4			Call
3.00" Diameter x 0.125" Thickness	EJTLAOX403A2			Call
3.00" Diameter x 0.250" Thickness	EJTLAOX403A4			Call
4.00" Diameter x 0.125" Thickness	EJTLAOX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTLAOX404A4			Call



Lead, Pb

■ Lead, Pb (Porosity, Surface Imperfections)

Size	Lead, Pb (99.99+% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTPBXX401A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTPBXX401A4			Call
2.00" Diameter x 0.125" Thickness	EJTPBXX402A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTPBXX402A4			Call
3.00" Diameter x 0.125" Thickness	EJTPBXX403A2			Call
3.00" Diameter x 0.250" Thickness	EJTPBXX403A4			Call
4.00" Diameter x 0.125" Thickness	EJTPBXX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTPBXX404A4			Call

■ Lead Telluride, $PbTe$ (Bond)

Size	Lead Telluride, $PbTe$ (99.99% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTPBTE401A2			Call
1.00" Diameter x 0.250" Thickness	EJTPBTE401A4			Call
2.00" Diameter x 0.125" Thickness	EJTPBTE402A2			Call
2.00" Diameter x 0.250" Thickness	EJTPBTE402A4			Call
3.00" Diameter x 0.125" Thickness	EJTPBTE403A2			Call
3.00" Diameter x 0.250" Thickness	EJTPBTE403A4			Call
4.00" Diameter x 0.125" Thickness	EJTPBTE404A2			Call
4.00" Diameter x 0.250" Thickness	EJTPBTE404A4			Call
6.00" Diameter x 0.250" Thickness	EJTPBTE406A4			Call
8.00" Diameter x 0.250" Thickness	EJTPBTE408A4			Call

■ Lead Titanate, $PbTiO_3$ (Bond)

Size	Lead Titanate, $PbTiO_3$ (99.9% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTPBTO301A2			Call
1.00" Diameter x 0.250" Thickness	EJTPBTO301A4			Call
2.00" Diameter x 0.125" Thickness	EJTPBTO302A2			Call
2.00" Diameter x 0.250" Thickness	EJTPBTO302A4			Call
3.00" Diameter x 0.125" Thickness	EJTPBTO303A2			Call
3.00" Diameter x 0.250" Thickness	EJTPBTO303A4			Call
4.00" Diameter x 0.125" Thickness	EJTPBTO304A2			Call
4.00" Diameter x 0.250" Thickness	EJTPBTO304A4			Call

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Deposition Materials

➤ Lead Compounds

■ Lead Zirconate, $PbZrO_3$ (Bond)

Size	Lead Zirconate, $PbZrO_3$ (99.7% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTPBZO271A2		Call
1.00" Diameter x 0.250" Thickness	EJTPBZO271A4		Call
2.00" Diameter x 0.125" Thickness	EJTPBZO272A2		Call
2.00" Diameter x 0.250" Thickness	EJTPBZO272A4		Call
3.00" Diameter x 0.125" Thickness	EJTPBZO273A2		Call
3.00" Diameter x 0.250" Thickness	EJTPBZO273A4		Call
4.00" Diameter x 0.125" Thickness	EJTPBZO274A2		Call
4.00" Diameter x 0.250" Thickness	EJTPBZO274A4		Call

■ Lead Zirconate Titanate, $PbZr_{1-x}Ti_xO_3$ (Bond)

Size	Lead Zirconate Titanate, $PbZr_{1-x}Ti_xO_3$ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTPZT301A2		Call
1.00" Diameter x 0.250" Thickness	EJTPZT301A4		Call
2.00" Diameter x 0.125" Thickness	EJTPZT302A2		Call
2.00" Diameter x 0.250" Thickness	EJTPZT302A4		Call
3.00" Diameter x 0.125" Thickness	EJTPZT303A2		Call
3.00" Diameter x 0.250" Thickness	EJTPZT303A4		Call
4.00" Diameter x 0.125" Thickness	EJTPZT304A2		Call
4.00" Diameter x 0.250" Thickness	EJTPZT304A4		Call

Deposition Materials
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Novel manufacturing techniques
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Optical materials such as
Ta, Nb, and Si, designed for
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processing.

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production of
aluminum targets
& tungsten filaments
for automotive
lighting.

► Lithium Niobate, Magnesium & Magnesium Fluoride

■ Lithium Niobate, LiNbO_3 (Bond)

Size	Lithium Niobate, LiNbO_3 (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTLINO301A2		Call
1.00" Diameter x 0.250" Thickness	EJTLINO301A4		Call
2.00" Diameter x 0.125" Thickness	EJTLINO302A2		Call
2.00" Diameter x 0.250" Thickness	EJTLINO302A4		Call
3.00" Diameter x 0.125" Thickness	EJTLINO303A2		Call
3.00" Diameter x 0.250" Thickness	EJTLINO303A4		Call
4.00" Diameter x 0.125" Thickness	EJTLINO304A2		Call
4.00" Diameter x 0.250" Thickness	EJTLINO304A4		Call

■ Magnesium, Mg

Size	Magnesium, Mg (99.98% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMGXX381A2		Call
1.00" Diameter x 0.250" Thickness	EJTMGXX381A4		Call
2.00" Diameter x 0.125" Thickness	EJTMGXX382A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTMGXX382A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTMGXX383A2		Call
3.00" Diameter x 0.250" Thickness	EJTMGXX383A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTMGXX384A2		Call
4.00" Diameter x 0.250" Thickness	EJTMGXX384A4		Call
6.00" Diameter x 0.250" Thickness	EJTMGXX386A4		Call
8.00" Diameter x 0.250" Thickness	EJTMGXX388A4		Call

Size	Magnesium, Mg (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMGXX351A2		Call
1.00" Diameter x 0.250" Thickness	EJTMGXX351A4		Call
2.00" Diameter x 0.125" Thickness	EJTMGXX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTMGXX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTMGXX353A2		Call
3.00" Diameter x 0.250" Thickness	EJTMGXX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTMGXX354A2		Call
4.00" Diameter x 0.250" Thickness	EJTMGXX354A4		Call
6.00" Diameter x 0.250" Thickness	EJTMGXX356A4		Call
8.00" Diameter x 0.250" Thickness	EJTMGXX358A4		Call

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Deposition Materials



Magnesium, Mg

Magnesium Fluoride, MgF_2

■ Magnesium Fluoride, MgF_2 (Bond)

Size	Magnesium Fluoride, MgF_2 (99.9% Purity ex. Ca) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMGFX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTMGFX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTMGFX302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTMGFX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTMGFX303A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTMGFX303A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTMGFX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTMGFX304A4		Call
6.00" Diameter x 0.250" Thickness	EJTMGFX306A4		Call
8.00" Diameter x 0.250" Thickness	EJTMGFX308A4		Call

➤ Magnesium Oxide, Manganese & Compounds

■ Magnesium Oxide, MgO (Bond)

Size	Magnesium Oxide, MgO (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMGOX351A2		Call
1.00" Diameter x 0.250" Thickness	EJTMGOX351A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTMGOX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTMGOX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTMGOX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTMGOX353A4		Call
4.00" Diameter x 0.125" Thickness	EJTMGOX354A2		Call
4.00" Diameter x 0.250" Thickness	EJTMGOX354A4		Call
6.00" Diameter x 0.250" Thickness	EJTMGOX356A4		Call
8.00" Diameter x 0.250" Thickness	EJTMGOX358A4		Call



Magnesium Oxide, MgO

■ Manganese, Mn (Surface Imperfections, Bond)

Size	Manganese, Mn (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMNXX351A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTMNXX351A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTMNXX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTMNXX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTMNXX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTMNXX353A4		Call
4.00" Diameter x 0.125" Thickness	EJTMNXX354A2		Call
4.00" Diameter x 0.250" Thickness	EJTMNXX354A4		Call
6.00" Diameter x 0.250" Thickness	EJTMNXX356A4		Call
8.00" Diameter x 0.250" Thickness	EJTMNXX358A4		Call



Manganese, Mn

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Deposition Materials

■ Manganese Oxide, MnO (Bond)

Size	Manganese Oxide, MnO (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMNOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTMNOX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTMNOX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTMNOX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTMNOX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTMNOX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTMNOX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTMNOX304A4		Call
6.00" Diameter x 0.250" Thickness	EJTMNOX306A4		Call
8.00" Diameter x 0.250" Thickness	EJTMNOX308A4		Call

► Molybdenum & Compounds

■ Molybdenum, Mo

Size	Molybdenum, Mo (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMOXX351A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTMOXX351A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTMOXX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTMOXX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTMOXX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTMOXX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTMOXX354A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTMOXX354A4	•	Call
6.00" Diameter x 0.125" Thickness	EJTMOXX356A2		Call
6.00" Diameter x 0.250" Thickness	EJTMOXX356A4	•	Call
8.00" Diameter x 0.125" Thickness	EJTMOXX358A2		Call
8.00" Diameter x 0.250" Thickness	EJTMOXX358A4		Call

Molybdenum Carbide, Mo₂C

■ Molybdenum Carbide, Mo₂C (Bond)

Size	Molybdenum Carbide, Mo ₂ C (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMOCX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTMOCX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTMOCX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTMOCX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTMOCX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTMOCX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTMOCX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTMOCX254A4		Call

■ Molybdenum Disilicide, MoSi₂ (Bond)

Size	Molybdenum Disilicide, MoSi ₂ (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMOSI251A2		Call
1.00" Diameter x 0.250" Thickness	EJTMOSI251A4		Call
2.00" Diameter x 0.125" Thickness	EJTMOSI252A2		Call
2.00" Diameter x 0.250" Thickness	EJTMOSI252A4		Call
3.00" Diameter x 0.125" Thickness	EJTMOSI253A2		Call
3.00" Diameter x 0.250" Thickness	EJTMOSI253A4		Call
4.00" Diameter x 0.125" Thickness	EJTMOSI254A2		Call
4.00" Diameter x 0.250" Thickness	EJTMOSI254A4		Call

■ Molybdenum Oxide, MoO₃ (Bond)

Size	Molybdenum Oxide, MoO ₃ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMOOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTMOOX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTMOOX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTMOOX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTMOOX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTMOOX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTMOOX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTMOOX304A4		Call

■ Molybdenum Disulfide, MoS₂ (Bond)

Size	Molybdenum Disulfide, MoS ₂ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTMOSX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTMOSX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTMOSX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTMOSX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTMOSX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTMOSX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTMOSX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTMOSX304A4		Call

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Deposition Materials

► Neodymium & Nickel

■ Neodymium, Nd (May Be Packed In Oil)

Size	Neodymium, Nd (99.9% Purity TREM) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNDXX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTNDXX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTNDXX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTNDXX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTNDXX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTNDXX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTNDXX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTNDXX304A4		Call



Neodymium, Nd

■ Nickel, Ni (Magnetic)

Size	Nickel, Ni (99.995% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNIXX451A2	•	Call
2.00" Diameter x 0.125" Thickness	EJTNIXX452A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTNIXX452A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTNIXX453A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTNIXX453A4		Call
4.00" Diameter x 0.125" Thickness	EJTNIXX454A2		Call
4.00" Diameter x 0.250" Thickness	EJTNIXX454A4		Call
6.00" Diameter x 0.125" Thickness	EJTNIXX456A2		Call
6.00" Diameter x 0.250" Thickness	EJTNIXX456A4		Call
8.00" Diameter x 0.125" Thickness	EJTNIXX458A2		Call
8.00" Diameter x 0.250" Thickness	EJTNIXX458A4		Call
Nickel, Ni (99.99% Purity)			
1.00" Diameter x 0.063" Thickness	EJTNIXX401A1		Call
1.00" Diameter x 0.125" Thickness	EJTNIXX401A2		Call
2.00" Diameter x 0.063" Thickness	EJTNIXX402A1	•	Call
2.00" Diameter x 0.125" Thickness	EJTNIXX402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTNIXX402A4		Call
3.00" Diameter x 0.063" Thickness	EJTNIXX403A1	•	Call
3.00" Diameter x 0.125" Thickness	EJTNIXX403A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTNIXX403A4	•	Call
4.00" Diameter x 0.063" Thickness	EJTNIXX404A1		Call
4.00" Diameter x 0.125" Thickness	EJTNIXX404A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTNIXX404A4	•	Call
6.00" Diameter x 0.125" Thickness	EJTNIXX406A2		Call
6.00" Diameter x 0.250" Thickness	EJTNIXX406A4	•	Call
8.00" Diameter x 0.125" Thickness	EJTNIXX408A2	•	Call
8.00" Diameter x 0.250" Thickness	EJTNIXX408A4	•	Call
Nickel, Ni (99.9% Purity)			
1.00" Diameter x 0.125" Thickness	EJTNIXX301A2	•	Call
2.00" Diameter x 0.063" Thickness	EJTNIXX302A1	•	Call
2.00" Diameter x 0.125" Thickness	EJTNIXX302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTNIXX302A4		Call
3.00" Diameter x 0.063" Thickness	EJTNIXX303A1		Call
3.00" Diameter x 0.125" Thickness	EJTNIXX303A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTNIXX303A4	•	Call
4.00" Diameter x 0.063" Thickness	EJTNIXX304A1		Call
4.00" Diameter x 0.125" Thickness	EJTNIXX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTNIXX304A4		Call
6.00" Diameter x 0.125" Thickness	EJTNIXX306A2		Call
6.00" Diameter x 0.250" Thickness	EJTNIXX306A4		Call
8.00" Diameter x 0.125" Thickness	EJTNIXX308A2		Call
8.00" Diameter x 0.250" Thickness	EJTNIXX308A4		Call



Nickel, Ni

► Nickel Alloys & Compounds



Nickel Chromium, Ni/Cr 80/20 wt%

■ Nickel Chromium, Ni/Cr 80/20 wt%

Nickel Chromium, Ni/Cr 80/20 wt% (99.9% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNICR301A2		Call
1.00" Diameter x 0.250" Thickness	EJTNICR301A4		Call
2.00" Diameter x 0.125" Thickness	EJTNICR302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTNICR302A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTNICR303A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTNICR303A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTNICR304A2		Call
4.00" Diameter x 0.250" Thickness	EJTNICR304A4		Call

■ Nickel Iron, Ni/Fe 81/19 wt% (Magnetic)

Nickel Iron, Ni/Fe 81/19 wt (99.95% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNIFE251A1		Call
2.00" Diameter x 0.063" Thickness	EJTNIFE252A1	•	Call
2.00" Diameter x 0.125" Thickness	EJTNIFE252A2	•	Call
3.00" Diameter x 0.063" Thickness	EJTNIFE253A1		Call
3.00" Diameter x 0.125" Thickness	EJTNIFE253A2	•	Call
4.00" Diameter x 0.063" Thickness	EJTNIFE254A1		Call
4.00" Diameter x 0.125" Thickness	EJTNIFE254A2		Call
0.125" Thickness	EJTNIFE351A1		Call
1.00" Diameter x 0.250" Thickness	EJTNIFE351A4		Call
2.00" Diameter x 0.125" Thickness	EJTNIFE352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTNIFE352A4		Call
3.00" Diameter x 0.125" Thickness	EJTNIFE353A2		Call
3.00" Diameter x 0.250" Thickness	EJTNIFE353A4		Call

■ Nickel Oxide, NiO (Bond)

Nickel Oxide, NiO (99.995% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNIOX451A2		Call
1.00" Diameter x 0.250" Thickness	EJTNIOX451A4		Call
2.00" Diameter x 0.125" Thickness	EJTNIOX452A2		Call
2.00" Diameter x 0.250" Thickness	EJTNIOX452A4		Call
3.00" Diameter x 0.125" Thickness	EJTNIOX453A2		Call
3.00" Diameter x 0.250" Thickness	EJTNIOX453A4		Call
4.00" Diameter x 0.125" Thickness	EJTNIOX454A2		Call
4.00" Diameter x 0.250" Thickness	EJTNIOX454A4		Call
Nickel Oxide, NiO (99.9% Purity)			
1.00" Diameter x 0.125" Thickness	EJTNIOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTNIOX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTNIOX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTNIOX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTNIOX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTNIOX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTNIOX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTNIOX304A4		Call

■ Nickel Vanadium, Ni/V 93/7 wt%

Nickel Vanadium, Ni/V 93/7 wt% (99.95% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNIVX351A2		Call
1.00" Diameter x 0.250" Thickness	EJTNIVX351A4		Call
2.00" Diameter x 0.125" Thickness	EJTNIVX352A2		Call
2.00" Diameter x 0.250" Thickness	EJTNIVX352A4		Call
3.00" Diameter x 0.125" Thickness	EJTNIVX353A2		Call
3.00" Diameter x 0.250" Thickness	EJTNIVX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTNIVX354A2		Call
4.00" Diameter x 0.250" Thickness	EJTNIVX354A4	•	Call
6.00" Diameter x 0.250" Thickness	EJTNIVX356A4		Call
8.00" Diameter x 0.250" Thickness	EJTNIVX358A4		Call

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Deposition Materials

► Niobium & Compounds

■ Niobium, Nb

Size	Niobium, Nb (Columbium) (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNBXX351A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTNBXX351A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTNBXX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTNBXX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTNBXX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTNBXX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTNBXX354A2	•	Call
4.00" Diameter x 0.250" Thickness	EJTNBXX354A4	•	Call
6.00" Diameter x 0.125" Thickness	EJTNBXX356A2	•	Call
6.00" Diameter x 0.250" Thickness	EJTNBXX356A4	•	Call
8.00" Diameter x 0.125" Thickness	EJTNBXX358A2	•	Call
8.00" Diameter x 0.250" Thickness	EJTNBXX358A4	•	Call



Niobium, Nb

■ Niobium Carbide, NbC (Bond)

Size	Niobium Carbide, NbC (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTNBCX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTNBCX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTNBCX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTNBCX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTNBCX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTNBCX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTNBCX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTNBCX254A4		Call

■ Niobium Nitride, NbN (Bond)

Size	Niobium Nitride, NbN (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTBNBX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTBNBX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTBNBX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTBNBX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTBNBX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTBNBX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTBNBX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTBNBX254A4		Call

■ Niobium Oxide, Nb₂O₅ (Bond)

Size	Niobium Oxide, Nb ₂ O ₅ (99.995% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTBNBX451A2		Call
1.00" Diameter x 0.250" Thickness	EJTBNBX451A4		Call
2.00" Diameter x 0.125" Thickness	EJTBNBX452A2		Call
2.00" Diameter x 0.250" Thickness	EJTBNBX452A4		Call
3.00" Diameter x 0.125" Thickness	EJTBNBX453A2		Call
3.00" Diameter x 0.250" Thickness	EJTBNBX453A4		Call
4.00" Diameter x 0.125" Thickness	EJTBNBX454A2		Call
4.00" Diameter x 0.250" Thickness	EJTBNBX454A4		Call

► Palladium, Permalloy, Platinum & Praseodymium



Palladium, Pd

■ Palladium, Pd

Size	Palladium, Pd (99.95% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTPDXX351A2	•	Call
1.00" Diameter x 0.250" Thickness		EJTPDXX351A4		Call
2.00" Diameter x 0.625" Thickness		EJTPDXX352A1		Call
2.00" Diameter x 0.125" Thickness		EJTPDXX352A2	•	Call
2.00" Diameter x 0.250" Thickness		EJTPDXX352A4		Call
3.00" Diameter x 0.0625" Thickness		EJTPDXX353A1		Call
3.00" Diameter x 0.125" Thickness		EJTPDXX353A2	•	Call
3.00" Diameter x 0.250" Thickness		EJTPDXX353A4		Call
4.00" Diameter x 0.125" Thickness		EJTPDXX354A2		Call
4.00" Diameter x 0.250" Thickness		EJTPDXX354A4		Call
6.00" Diameter x 0.125" Thickness		EJTPDXX356A2		Call
6.00" Diameter x 0.250" Thickness		EJTPDXX356A4		Call
8.00" Diameter x 0.125" Thickness		EJTPDXX358A2		Call
8.00" Diameter x 0.250" Thickness		EJTPDXX358A4		Call

■ Permalloy, Hymu80 Ni/Fe/Mo/Mn (Magnetic)

Size	Permalloy (79% Ni, 16.7% Fe, 4% Mo, 0.3% Mn) (Commercial Grade)		Stocked Item	Price
		Part No.		
2.00" Diameter x 0.125" Thickness		EJTPERM252A2		Call
2.00" Diameter x 0.250" Thickness		EJTPERM252A4		Call
3.00" Diameter x 0.125" Thickness		EJTPERM253A2		Call
3.00" Diameter x 0.250" Thickness		EJTPERM253A4		Call
4.00" Diameter x 0.125" Thickness		EJTPERM254A2		Call
4.00" Diameter x 0.250" Thickness		EJTPERM254A4		Call

■ Platinum, Pt

Size	Platinum, Pt (99.99% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.063" Thickness		EJTPTXX401A1		Call
1.00" Diameter x 0.125" Thickness		EJTPTXX401A2		Call
1.00" Diameter x 0.250" Thickness		EJTPTXX401A4		Call
2.00" Diameter x 0.063" Thickness		EJTPTXX402A1	•	Call
2.00" Diameter x 0.125" Thickness		EJTPTXX402A2	•	Call
2.00" Diameter x 0.250" Thickness		EJTPTXX402A4		Call
3.00" Diameter x 0.625" Thickness		EJTPTXX403A1	•	Call
3.00" Diameter x 0.125" Thickness		EJTPTXX403A2		Call
3.00" Diameter x 0.250" Thickness		EJTPTXX403A4		Call
4.00" Diameter x 0.125" Thickness		EJTPTXX404A2		Call
4.00" Diameter x 0.250" Thickness		EJTPTXX404A4		Call
6.00" Diameter x 0.125" Thickness		EJTPTXX406A2		Call
6.00" Diameter x 0.250" Thickness		EJTPTXX406A4		Call
8.00" Diameter x 0.125" Thickness		EJTPTXX408A2		Call
8.00" Diameter x 0.250" Thickness		EJTPTXX408A4		Call

■ Praseodymium, Pr (May Be Packed In Oil)

Size	Praseodymium, Pr (99.9% Purity TREM)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTPRXX301A2		Call
1.00" Diameter x 0.250" Thickness		EJTPRXX301A4		Call
2.00" Diameter x 0.125" Thickness		EJTPRXX302A2		Call
2.00" Diameter x 0.250" Thickness		EJTPRXX302A4		Call
3.00" Diameter x 0.125" Thickness		EJTPRXX303A2		Call
3.00" Diameter x 0.250" Thickness		EJTPRXX303A4		Call
4.00" Diameter x 0.125" Thickness		EJTPRXX304A2		Call
4.00" Diameter x 0.250" Thickness		EJTPRXX304A4		Call
6.00" Diameter x 0.125" Thickness		EJTPRXX306A2		Call
6.00" Diameter x 0.250" Thickness		EJTPRXX306A4		Call
8.00" Diameter x 0.125" Thickness		EJTPRXX308A2		Call
8.00" Diameter x 0.250" Thickness		EJTPRXX308A4		Call

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Deposition Materials



Platinum, Pt

➤ Rhenium, Rhodium, Ruthenium, Samarium & Selenium

■ Rhenium, Re

Size	Rhenium, Re (99.99% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTREXX401A2		Call
1.00" Diameter x 0.250" Thickness	EJTREXX401A4		Call
2.00" Diameter x 0.125" Thickness	EJTREXX402A2		Call
2.00" Diameter x 0.250" Thickness	EJTREXX402A4		Call
3.00" Diameter x 0.125" Thickness	EJTREXX403A2		Call
3.00" Diameter x 0.250" Thickness	EJTREXX403A4		Call
4.00" Diameter x 0.125" Thickness	EJTREXX404A2		Call
4.00" Diameter x 0.250" Thickness	EJTREXX404A4		Call

■ Rhodium, Rh

Size	Rhodium, Rh (99.8% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTRHXX281A2		Call
1.00" Diameter x 0.250" Thickness	EJTRHXX281A4		Call
2.00" Diameter x 0.125" Thickness	EJTRHXX282A2		Call
2.00" Diameter x 0.250" Thickness	EJTRHXX282A4		Call
3.00" Diameter x 0.125" Thickness	EJTRHXX283A2		Call
3.00" Diameter x 0.250" Thickness	EJTRHXX283A4		Call
4.00" Diameter x 0.125" Thickness	EJTRHXX284A2		Call
4.00" Diameter x 0.250" Thickness	EJTRHXX284A4		Call

■ Ruthenium, Ru

Size	Ruthenium, Ru (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTRUXX351A2		Call
1.00" Diameter x 0.250" Thickness	EJTRUXX351A4		Call
2.00" Diameter x 0.125" Thickness	EJTRUXX352A2		Call
2.00" Diameter x 0.250" Thickness	EJTRUXX352A4		Call
3.00" Diameter x 0.125" Thickness	EJTRUXX353A2		Call
3.00" Diameter x 0.250" Thickness	EJTRUXX353A4		Call
4.00" Diameter x 0.125" Thickness	EJTRUXX354A2		Call
4.00" Diameter x 0.250" Thickness	EJTRUXX354A4		Call

■ Samarium, Sm (May Be Packed In Oil)

Size	Samarium, Sm (99.9% Purity TREM) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTSMXX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTSMXX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTSMXX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTSMXX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTSMXX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTSMXX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTSMXX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTSMXX304A4		Call

■ Selenium, Se (Bond, Porosity, Surface Imperfections)

Size	Selenium, Se (99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTSEX501A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTSEX501A4		Call
2.00" Diameter x 0.125" Thickness	EJTSEX502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTSEX502A4		Call
3.00" Diameter x 0.125" Thickness	EJTSEX503A2		Call
3.00" Diameter x 0.250" Thickness	EJTSEX503A4		Call
4.00" Diameter x 0.125" Thickness	EJTSEX504A2		Call
4.00" Diameter x 0.250" Thickness	EJTSEX504A4		Call



Samarium, Sm

► Silicon

■ Silicon Si, Undoped (Bond)

Size	Silicon (Si), Undoped (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTSIXX501A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTSIXX501A4		•	Call
2.00" Diameter x 0.125" Thickness	EJTSIXX502A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTSIXX502A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTSIXX503A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTSIXX503A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTSIXX504A2		•	Call
4.00" Diameter x 0.250" Thickness	EJTSIXX504A4			Call
6.00" Diameter x 0.125" Thickness	EJTSIXX506A2			Call
6.00" Diameter x 0.250" Thickness	EJTSIXX506A4			Call
8.00" Diameter x 0.125" Thickness	EJTSIXX508A2			Call
8.00" Diameter x 0.250" Thickness	EJTSIXX508A4			Call

■ Silicon Si, N-Type (Bond) (<0.1 Ohm-cm resistivity)

Size	Silicon (Si), N-Type (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTNSIX501A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTNSIX501A4			Call
2.00" Diameter x 0.125" Thickness	EJTNSIX502A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTNSIX502A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTNSIX503A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTNSIX503A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTNSIX504A2			Call
4.00" Diameter x 0.250" Thickness	EJTNSIX504A4			Call
6.00" Diameter x 0.125" Thickness	EJTNSIX506A2			Call
6.00" Diameter x 0.250" Thickness	EJTNSIX506A4			Call
8.00" Diameter x 0.125" Thickness	EJTNSIX508A2			Call
8.00" Diameter x 0.250" Thickness	EJTNSIX508A4			Call
4.75" x 14.875" x 0.250"	EJTNSIXMRCA4			Call

■ Silicon Si, P-Type (Bond) (0.005–0.020 Ohm-cm resistivity)

Size	Silicon (Si), P-Type (0.005–0.020 ohm-cm) (99.999% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTPSIX501A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTPSIX501A4			Call
2.00" Diameter x 0.125" Thickness	EJTPSIX502A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTPSIX502A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTPSIX503A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTPSIX503A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTPSIX504A2			Call
4.00" Diameter x 0.250" Thickness	EJTPSIX504A4		•	Call
6.00" Diameter x 0.125" Thickness	EJTPSIX506A2			Call
6.00" Diameter x 0.250" Thickness	EJTPSIX506A4			Call
8.00" Diameter x 0.125" Thickness	EJTPSIX508A2			Call
8.00" Diameter x 0.250" Thickness	EJTPSIX508A4		•	Call

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Deposition Materials

➤ Silicon Compounds

■ Silicon Carbide, SiC (Bond)

Size	Silicon Carbide, SiC (99.5% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTSICX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTSICX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTSICX252A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTSICX252A4			Call
3.00" Diameter x 0.125" Thickness	EJTSICX253A2			Call
3.00" Diameter x 0.250" Thickness	EJTSICX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTSICX254A2			Call
4.00" Diameter x 0.250" Thickness	EJTSICX254A4			Call



Silicon Carbide, SiC

■ Silicon Dioxide, SiO₂ (Bond)

Size	Silicon Dioxide, SiO ₂ (99.995% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTSIO2451A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTSIO2451A4		•	Call
2.00" Diameter x 0.125" Thickness	EJTSIO2452A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTSIO2452A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTSIO2453A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTSIO2453A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTSIO2454A2		•	Call
4.00" Diameter x 0.250" Thickness	EJTSIO2454A4		•	Call
6.00" Diameter x 0.125" Thickness	EJTSIO2456A2			Call
6.00" Diameter x 0.250" Thickness	EJTSIO2456A4			Call
8.00" Diameter x 0.250" Thickness	EJTSIO2458A4		•	Call



Silicon Dioxide, SiO₂

■ Silicon Monoxide, SiO (Bond)

Size	Silicon Monoxide, SiO (99.9% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTSIOX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTSIOX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTSIOX302A2			Call
2.00" Diameter x 0.250" Thickness	EJTSIOX302A4			Call
3.00" Diameter x 0.125" Thickness	EJTSIOX303A2			Call
3.00" Diameter x 0.250" Thickness	EJTSIOX303A4			Call
4.00" Diameter x 0.125" Thickness	EJTSIOX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTSIOX304A4			Call
6.00" Diameter x 0.250" Thickness	EJTSIOX306A4			Call
8.00" Diameter x 0.250" Thickness	EJTSIOX308A4			Call

■ Silicon Nitride, Si₃N₄ (Bond)

Size	Silicon Nitride, Si ₃ N ₄ (excl. Mg-based binder) (99.9% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTSINX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTSINX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTSINX302A2			Call
2.00" Diameter x 0.250" Thickness	EJTSINX302A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTSINX303A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTSINX303A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTSINX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTSINX304A4			Call



Silicon Nitride, Si₃N₄

► Silver, Strontium & Strontium Titanate



Silver, Ag

■ Silver, Ag

Size	Silver, Ag (99.99% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTAGXX401A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTAGXX401A4		•	Call
2.00" Diameter x 0.125" Thickness	EJTAGXX402A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTAGXX402A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTAGXX403A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTAGXX403A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTAGXX404A2			Call
4.00" Diameter x 0.250" Thickness	EJTAGXX404A4			Call
6.00" Diameter x 0.250" Thickness	EJTAGXX406A4			Call
8.00" Diameter x 0.250" Thickness	EJTAGXX408A4			Call



Strontium, Sr

■ Strontium, Sr (May Be Packed In Oil)

Size	Strontium, Sr (98% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTSRXX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTSRXX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTSRXX252A2			Call
2.00" Diameter x 0.250" Thickness	EJTSRXX252A4			Call
3.00" Diameter x 0.125" Thickness	EJTSRXX253A2			Call
3.00" Diameter x 0.250" Thickness	EJTSRXX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTSRXX254A2			Call
4.00" Diameter x 0.250" Thickness	EJTSRXX254A4			Call

Strontium Titanate, SrTiO₃

■ Strontium Titanate, SrTiO₃ (Bond)

Size	Strontium Titanate, SrTiO ₃ (99.9% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTSRTO301A2			Call
1.00" Diameter x 0.250" Thickness	EJTSRTO301A4			Call
2.00" Diameter x 0.125" Thickness	EJTSRTO302A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTSRTO302A4			Call
3.00" Diameter x 0.125" Thickness	EJTSRTO303A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTSRTO303A4			Call
4.00" Diameter x 0.125" Thickness	EJTSRTO304A2			Call
4.00" Diameter x 0.250" Thickness	EJTSRTO304A4			Call

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Deposition Materials

► Tantalum & Compounds

■ Tantalum, Ta

Size	Tantalum, Ta (99.95% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTAXX351A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTTAXX351A4	•	Call
2.00" Diameter x 0.125" Thickness	EJTTAXX352A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTTAXX352A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTTAXX353A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTTAXX353A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTTAXX354A2		Call
4.00" Diameter x 0.250" Thickness	EJTTAXX354A4	•	Call
6.00" Diameter x 0.250" Thickness	EJTTAXX356A4		Call
8.00" Diameter x 0.125" Thickness	EJTTAXX358A2		Call
8.00" Diameter x 0.250" Thickness	EJTTAXX358A4		Call



Tantalum, Ta

■ Tantalum Carbide, TaC (Bond)

Size	Tantalum Carbide, TaC (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTACX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTTACX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTTACX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTTACX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTTACX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTTACX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTTACX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTTACX254A4		Call
6.00" Diameter x 0.250" Thickness	EJTTACX256A4		Call
8.00" Diameter x 0.250" Thickness	EJTTACX258A4		Call

■ Tantalum Nitride, TaN (Bond)

Size	Tantalum Nitride, TaN (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTANX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTTANX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTTANX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTTANX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTTANX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTTANX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTTANX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTTANX254A4		Call

► Tantalum Compounds

■ Tantalum Oxide, Ta_2O_5 (Bond)

Size	Tantalum Oxide, Ta_2O_5 (99.995% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTAOX451A2		Call
1.00" Diameter x 0.250" Thickness	EJTTAOX451A4		Call
2.00" Diameter x 0.125" Thickness	EJTTAOX452A2		Call
2.00" Diameter x 0.250" Thickness	EJTTAOX452A4		Call
3.00" Diameter x 0.125" Thickness	EJTTAOX453A2		Call
3.00" Diameter x 0.250" Thickness	EJTTAOX453A4		Call
4.00" Diameter x 0.125" Thickness	EJTTAOX454A2		Call
4.00" Diameter x 0.250" Thickness	EJTTAOX454A4		Call

■ Tantalum Silicide, $TaSi_2$ (Bond)

Size	Tantalum Silicide, $TaSi_2$ (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTASI251A2		Call
1.00" Diameter x 0.250" Thickness	EJTASI251A4		Call
2.00" Diameter x 0.125" Thickness	EJTASI252A2		Call
2.00" Diameter x 0.250" Thickness	EJTASI252A4		Call
3.00" Diameter x 0.125" Thickness	EJTASI253A2		Call
3.00" Diameter x 0.250" Thickness	EJTASI253A4		Call
4.00" Diameter x 0.125" Thickness	EJTASI254A2		Call
4.00" Diameter x 0.250" Thickness	EJTASI254A4		Call

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Deposition Materials

Kurt J. Lesker
Company

Fomblin & Galden

THE Source of
Solvay Solexis
Vacuum Fluids
and Greases in
North America
and Europe.

➤ Tellurium, Terbium, Tin & Tin Oxide

■ Tellurium, Te (Porosity, Surface Imperfections)

Size	Tellurium, Te (99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTEXX501A2		Call
1.00" Diameter x 0.250" Thickness	EJTTEXX501A4		Call
2.00" Diameter x 0.125" Thickness	EJTTEXX502A2		Call
2.00" Diameter x 0.250" Thickness	EJTTEXX502A4		Call
3.00" Diameter x 0.125" Thickness	EJTTEXX503A2		Call
3.00" Diameter x 0.250" Thickness	EJTTEXX503A4		Call
4.00" Diameter x 0.125" Thickness	EJTTEXX504A2		Call
4.00" Diameter x 0.250" Thickness	EJTTEXX504A4		Call

■ Terbium, Tb (May Be Packed In Oil)

Size	Terbium, Tb (99.9% Purity TREM) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTBXX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTTBXX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTTBXX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTTBXX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTTBXX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTTBXX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTTBXX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTTBXX304A4		Call

■ Tin, Sn

Size	Tin, Sn (99.998% - 99.999% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTSNXX501A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTSNXX501A4		Call
2.00" Diameter x 0.125" Thickness	EJTSNXX502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTSNXX502A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTSNXX503A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTSNXX503A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTSNXX504A2		Call
4.00" Diameter x 0.250" Thickness	EJTSNXX504A4		Call
6.00" Diameter x 0.125" Thickness	EJTSNXX506A2		Call
6.00" Diameter x 0.250" Thickness	EJTSNXX506A4		Call
8.00" Diameter x 0.125" Thickness	EJTSNXX508A2		Call
8.00" Diameter x 0.250" Thickness	EJTSNXX508A4		Call

■ Tin Oxide, SnO₂ (Bond)

Size	Tin Oxide, SnO ₂ (99.99% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTSNOX401A2		Call
1.00" Diameter x 0.250" Thickness	EJTSNOX401A4		Call
2.00" Diameter x 0.125" Thickness	EJTSNOX402A2		Call
2.00" Diameter x 0.250" Thickness	EJTSNOX402A4		Call
3.00" Diameter x 0.125" Thickness	EJTSNOX403A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTSNOX403A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTSNOX404A2		Call
4.00" Diameter x 0.250" Thickness	EJTSNOX404A4		Call



Tin, Sn



Tin Oxide, SnO₂

Titanium & Compounds

Titanium, Ti



Titanium, Ti

Titanium, Ti (99.995% Purity)				
Size	Part No.	Stocked Item	Price	
1.00" Diameter x 0.125" Thickness	EJTTIXX451A2	•	Call	
1.00" Diameter x 0.250" Thickness	EJTTIXX451A4	•	Call	
2.00" Diameter x 0.125" Thickness	EJTTIXX452A2	•	Call	
2.00" Diameter x 0.250" Thickness	EJTTIXX452A4	•	Call	
3.00" Diameter x 0.125" Thickness	EJTTIXX453A2	•	Call	
3.00" Diameter x 0.250" Thickness	EJTTIXX453A4	•	Call	
4.00" Diameter x 0.125" Thickness	EJTTIXX454A2	•	Call	
4.00" Diameter x 0.250" Thickness	EJTTIXX454A4	•	Call	
5.00" Diameter x 0.250" Thickness	EJTTIXX455A4	•	Call	
6.00" Diameter x 0.125" Thickness	EJTTIXX456A2	•	Call	
6.00" Diameter x 0.250" Thickness	EJTTIXX456A4	•	Call	
8.00" Diameter x 0.125" Thickness	EJTTIXX458A2	•	Call	
8.00" Diameter x 0.250" Thickness	EJTTIXX458A4	•	Call	
Titanium, Ti (99.97%–99.98% Purity)				
1.00" Diameter x 0.125" Thickness	EJTTIXX371A2	•	Call	
1.00" Diameter x 0.250" Thickness	EJTTIXX371A4	•	Call	
2.00" Diameter x 0.125" Thickness	EJTTIXX372A2	•	Call	
2.00" Diameter x 0.250" Thickness	EJTTIXX372A4	•	Call	
3.00" Diameter x 0.125" Thickness	EJTTIXX373A2	•	Call	
3.00" Diameter x 0.250" Thickness	EJTTIXX373A4	•	Call	
4.00" Diameter x 0.125" Thickness	EJTTIXX374A2	•	Call	
4.00" Diameter x 0.250" Thickness	EJTTIXX374A4	•	Call	
6.00" Diameter x 0.250" Thickness	EJTTIXX376A4	•	Call	
8.00" Diameter x 0.250" Thickness	EJTTIXX378A4	•	Call	
Titanium, Ti; (Grade II) (99.2%–99.7% Purity)				
1.00" Diameter x 0.125" Thickness	EJTTIXX271A2	•	Call	
1.00" Diameter x 0.250" Thickness	EJTTIXX271A4	•	Call	
2.00" Diameter x 0.125" Thickness	EJTTIXX272A2	•	Call	
2.00" Diameter x 0.250" Thickness	EJTTIXX272A4	•	Call	
3.00" Diameter x 0.125" Thickness	EJTTIXX273A2	•	Call	
3.00" Diameter x 0.250" Thickness	EJTTIXX273A4	•	Call	
4.00" Diameter x 0.125" Thickness	EJTTIXX274A2	•	Call	
4.00" Diameter x 0.250" Thickness	EJTTIXX274A4	•	Call	
6.00" Diameter x 0.250" Thickness	EJTTIXX276A4	•	Call	
8.00" Diameter x 0.250" Thickness	EJTTIXX278A4	•	Call	

Titanium Boride, TiB₂ (Bond)

Titanium Boride, TiB ₂ (99.5% Purity)				
Size	Part No.	Stocked Item	Price	
1.00" Diameter x 0.125" Thickness	EJTTIBX251A2	•	Call	
1.00" Diameter x 0.250" Thickness	EJTTIBX251A4	•	Call	
2.00" Diameter x 0.125" Thickness	EJTTIBX252A2	•	Call	
2.00" Diameter x 0.250" Thickness	EJTTIBX252A4	•	Call	
3.00" Diameter x 0.125" Thickness	EJTTIBX253A2	•	Call	
3.00" Diameter x 0.250" Thickness	EJTTIBX253A4	•	Call	
4.00" Diameter x 0.125" Thickness	EJTTIBX254A2	•	Call	
4.00" Diameter x 0.125" Thickness	EJTTIBX254A4	•	Call	

Titanium Carbide, TiC (Bond)

Titanium Carbide, TiC (99.5% Purity)				
Size	Part No.	Stocked Item	Price	
1.00" Diameter x 0.125" Thickness	EJTTCIX251A2	•	Call	
1.00" Diameter x 0.250" Thickness	EJTTCIX251A4	•	Call	
2.00" Diameter x 0.125" Thickness	EJTTCIX252A2	•	Call	
2.00" Diameter x 0.250" Thickness	EJTTCIX252A4	•	Call	
3.00" Diameter x 0.125" Thickness	EJTTCIX253A2	•	Call	
3.00" Diameter x 0.250" Thickness	EJTTCIX253A4	•	Call	
4.00" Diameter x 0.125" Thickness	EJTTCIX254A2	•	Call	
4.00" Diameter x 0.250" Thickness	EJTTCIX254A4	•	Call	



Titanium Carbide, TiC

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Deposition Materials

➤ Titanium Compounds

■ Titanium Monoxide, TiO (Bond)

Size	Titanium Monoxide, TiO (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTIOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTTIOX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTTIOX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTTIOX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTTIOX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTTIOX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTTIOX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTTIOX304A4		Call
6.00" Diameter x 0.250" Thickness	EJTTIOX306A4		Call
8.00" Diameter x 0.250" Thickness	EJTTIOX308A4		Call

■ Titanium Disilicide, $TiSi_2$ (Bond)

Size	Titanium Disilicide, $TiSi_2$ (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTISI251A2		Call
1.00" Diameter x 0.250" Thickness	EJTTISI251A4		Call
2.00" Diameter x 0.125" Thickness	EJTTISI252A2		Call
2.00" Diameter x 0.250" Thickness	EJTTISI252A4		Call
3.00" Diameter x 0.125" Thickness	EJTTISI253A2		Call
3.00" Diameter x 0.2505" Thickness	EJTTISI253A4		Call
4.00" Diameter x 0.125" Thickness	EJTTISI254A2		Call
4.00" Diameter x 0.250" Thickness	EJTTISI254A4		Call
6.00" Diameter x 0.250" Thickness	EJTTISI256A4		Call
8.00" Diameter x 0.250" Thickness	EJTTISI258A4		Call

■ Titanium Dioxide, TiO_2 (Bond)

Size	Titanium Dioxide, TiO_2 (99.9% Purity) Grey to Black Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTIO2301A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTTIO2301A4		Call
2.00" Diameter x 0.125" Thickness	EJTTIO2302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTTIO2302A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTTIO2303A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTTIO2303A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTTIO2304A2		Call
4.00" Diameter x 0.250" Thickness	EJTTIO2304A4		Call

Size	Titanium Dioxide, TiO_2 (99.99% Purity) Beige to White Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTIO2401A2		Call
1.00" Diameter x 0.250" Thickness	EJTTIO2401A4		Call
2.00" Diameter x 0.125" Thickness	EJTTIO2402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTTIO2402A4		Call
3.00" Diameter x 0.125" Thickness	EJTTIO2403A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTTIO2403A4		Call
4.00" Diameter x 0.125" Thickness	EJTTIO2404A2		Call
4.00" Diameter x 0.250" Thickness	EJTTIO2404A4		Call

■ Titanium Nitride, TiN (Bond)

Size	Titanium Nitride, TiN (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTTINX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTTINX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTTINX252A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTTINX252A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTTINX253A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTTINX253A4		Call
4.00" Diameter x 0.125" Thickness	EJTTINX254A2		Call
4.00" Diameter x 0.250" Thickness	EJTTINX254A4		Call



Titanium Dioxide, TiO_2



Titanium Nitride, TiN

➤ Tungsten & Compounds



Tungsten, W

■ Tungsten, W

Size	Tungsten, W (99.95% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTWXXX351A2		•	Call
1.00" Diameter x 0.250" Thickness	EJTWXXX351A4		•	Call
2.00" Diameter x 0.125" Thickness	EJTWXXX352A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTWXXX352A4		•	Call
3.00" Diameter x 0.125" Thickness	EJTWXXX353A2		•	Call
3.00" Diameter x 0.250" Thickness	EJTWXXX353A4		•	Call
4.00" Diameter x 0.125" Thickness	EJTWXXX354A2		•	Call
4.00" Diameter x 0.250" Thickness	EJTWXXX354A4		•	Call
6.000" Diameter x 0.250" Thickness	EJTWXXX356A4			Call
8.00" Diameter x 0.125" Thickness	EJTWXXX358A2			Call
8.00" Diameter x 0.250" Thickness	EJTWXXX358A4			Call

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Deposition Materials

■ Tungsten Carbide, WC (Bond)

Size	Tungsten Carbide, WC (99.5% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTWCCX251A2			Call
1.00" Diameter x 0.250" Thickness	EJTWCCX251A4			Call
2.00" Diameter x 0.125" Thickness	EJTWCCX252A2			Call
2.00" Diameter x 0.250" Thickness	EJTWCCX252A4			Call
3.00" Diameter x 0.125" Thickness	EJTWCCX253A2			Call
3.00" Diameter x 0.250" Thickness	EJTWCCX253A4			Call
4.00" Diameter x 0.125" Thickness	EJTWCCX254A2			Call
4.00" Diameter x 0.250" Thickness	EJTWCCX254A4			Call

Tungsten Oxide, WO₃

■ Tungsten Oxide, WO₃ (Bond)

Size	Tungsten Oxide, WO ₃ (99.9% Purity)		Stocked Item	Price
	Part No.			
1.00" Diameter x 0.125" Thickness	EJTWQXX301A2			Call
1.00" Diameter x 0.250" Thickness	EJTWQXX301A4			Call
2.00" Diameter x 0.125" Thickness	EJTWQXX302A2		•	Call
2.00" Diameter x 0.250" Thickness	EJTWQXX302A4			Call
3.00" Diameter x 0.125" Thickness	EJTWQXX303A2			Call
3.00" Diameter x 0.250" Thickness	EJTWQXX303A4			Call
4.00" Diameter x 0.125" Thickness	EJTWQXX304A2			Call
4.00" Diameter x 0.250" Thickness	EJTWQXX304A4			Call

➤ Tungsten Compounds & Alloys

■ Tungsten Disilicide, WSi_2 (Bond)

Size	Tungsten Disilicide, WSi_2 (99.5% Purity)		Price
	Part No.	Stocked Item	
1.00" Diameter x 0.125" Thickness	EJTWSEX251A2		Call
1.00" Diameter x 0.250" Thickness	EJTWSEX251A4		Call
2.00" Diameter x 0.125" Thickness	EJTWSEX252A2		Call
2.00" Diameter x 0.250" Thickness	EJTWSEX252A4		Call
3.00" Diameter x 0.125" Thickness	EJTWSEX253A2		Call
3.00" Diameter x 0.250" Thickness	EJTWSEX253A4		Call

■ Tungsten Disulfide, WS_2 (Bond)

Size	Tungsten Disulfide, WS_2 (99.8% Purity)		Price
	Part No.	Stocked Item	
1.00" Diameter x 0.125" Thickness	EJTWSEX281A2		Call
1.00" Diameter x 0.250" Thickness	EJTWSEX281A4		Call
2.00" Diameter x 0.125" Thickness	EJTWSEX282A2		Call
2.00" Diameter x 0.250" Thickness	EJTWSEX282A4		Call
3.00" Diameter x 0.125" Thickness	EJTWSEX283A2		Call
3.00" Diameter x 0.250" Thickness	EJTWSEX283A4		Call
4.00" Diameter x 0.125" Thickness	EJTWSEX284A2		Call
4.00" Diameter x 0.250" Thickness	EJTWSEX284A4		Call
5.00" Diameter x 0.125" Thickness	EJTWSEX285A2		Call
5.00" Diameter x 0.250" Thickness	EJTWSEX285A4		Call
6.00" Diameter x 0.250" Thickness	EJTWSEX286A4		Call
8.00" Diameter x 0.250" Thickness	EJTWSEX288A4		Call

■ Tungsten/Titanium, W/Ti 90/10 wt%

Size	Tungsten/ Titanium, W/Ti 90/10 wt%(99.99% Purity)		Price
	Part No.	Stocked Item	
1.00" Diameter x 0.125" Thickness	EJTWXTI401A2		Call
1.00" Diameter x 0.250" Thickness	EJTWXTI401A4		Call
2.00" Diameter x 0.125" Thickness	EJTWXTI402A2		Call
2.00" Diameter x 0.125" Thickness	EJTWXTI402A4		Call
3.00" Diameter x 0.125" Thickness	EJTWXTI403A2		Call
3.00" Diameter x 0.125" Thickness	EJTWXTI403A4		Call
4.00" Diameter x 0.125" Thickness	EJTWXTI404A2		Call
4.00" Diameter x 0.125" Thickness	EJTWXTI404A4		Call
6.00" Diameter x 0.125" Thickness	EJTWXTI406A2		Call
6.00" Diameter x 0.125" Thickness	EJTWXTI406A4		Call
8.00" Diameter x 0.125" Thickness	EJTWXTI408A4		Call

► Vanadium & Compounds



Vanadium

■ Vanadium, V

Size	Vanadium, V (99.5% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTVXXX251A2	•	Call
1.00" Diameter x 0.250" Thickness		EJTVXXX251A4	•	Call
2.00" Diameter x 0.125" Thickness		EJTVXXX252A2	•	Call
2.00" Diameter x 0.250" Thickness		EJTVXXX252A4	•	Call
3.00" Diameter x 0.125" Thickness		EJTVXXX253A2		Call
3.00" Diameter x 0.250" Thickness		EJTVXXX253A4	•	Call
4.00" Diameter x 0.125" Thickness		EJTVXXX254A2		Call
4.00" Diameter x 0.250" Thickness		EJTVXXX254A4		Call

■ Vanadium Carbide, VC (Bond)

Size	Vanadium Carbide, VC (99.5% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTVCCX251A2		Call
1.00" Diameter x 0.250" Thickness		EJTVCCX251A4		Call
2.00" Diameter x 0.125" Thickness		EJTVCCX252A2		Call
2.00" Diameter x 0.250" Thickness		EJTVCCX252A4		Call
3.00" Diameter x 0.125" Thickness		EJTVCCX253A2		Call
3.00" Diameter x 0.250" Thickness		EJTVCCX253A4		Call
4.00" Diameter x 0.125" Thickness		EJTVCCX254A2		Call
4.00" Diameter x 0.250" Thickness		EJTVCCX254A4		Call

■ Vanadium Oxide, V₂O₅ (Bond, As Pressed)

Size	Vanadium Oxide, V ₂ O ₅ (99.9% Purity)		Stocked Item	Price
		Part No.		
1.00" Diameter x 0.125" Thickness		EJTVVXX301A2		Call
1.00" Diameter x 0.250" Thickness		EJTVVXX301A4		Call
2.00" Diameter x 0.125" Thickness		EJTVVXX302A2		Call
2.00" Diameter x 0.250" Thickness		EJTVVXX302A4		Call
3.00" Diameter x 0.125" Thickness		EJTVVXX303A2		Call
3.00" Diameter x 0.250" Thickness		EJTVVXX303A4		Call
4.00" Diameter x 0.125" Thickness		EJTVVXX304A2		Call
4.00" Diameter x 0.250" Thickness		EJTVVXX304A4		Call
6.00" Diameter x 0.250" Thickness		EJTVVXX306A4		Call
8.00" Diameter x 0.250" Thickness		EJTVVXX308A4		Call

Vanadium Oxide V₂O₅

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Deposition Materials

➤ Ytterbium & Ytterbium Oxide

■ Ytterbium, Yb (May Be Packed In Oil)

Size	Ytterbium, Yb (99.9% Purity TREM) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTYBXX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTYBXX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTYBXX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTYBXX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTYBXX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTYBXX303A4		Call

■ Ytterbium Oxide, Yb₂O₃ (Bond)

Size	Ytterbium Oxide, Yb ₂ O ₃ (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTYBOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJTYBOX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTYBOX302A2		Call
2.00" Diameter x 0.250" Thickness	EJTYBOX302A4		Call
3.00" Diameter x 0.125" Thickness	EJTYBOX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTYBOX303A4		Call

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OPVs

CPVs

CIS/CIGS

Se Evap Source

Thin Film PV

➤ Yttrium & Yttrium Oxide, Zinc



Yttrium, Y

■ Yttrium, Y (May Be Packed In Oil)

Size	Yttrium, Y (99.9% Purity) TREM Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTYXXX301A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTYXXX301A4		Call
2.00" Diameter x 0.125" Thickness	EJTYXXX302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTYXXX302A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTYXXX303A2		Call
3.00" Diameter x 0.250" Thickness	EJTYXXX303A4		Call
4.00" Diameter x 0.125" Thickness	EJTYXXX304A2		Call
4.00" Diameter x 0.250" Thickness	EJTYXXX304A4		Call

Yttrium Oxide, Y₂O₃

■ Yttrium Oxide, Y₂O₃ (Bond)

Size	Yttrium Oxide, Y ₂ O ₃ (99.99% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTYOXX401A2		Call
1.00" Diameter x 0.250" Thickness	EJTYOXX401A4		Call
2.00" Diameter x 0.125" Thickness	EJTYOXX402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTYOXX402A4		Call
3.00" Diameter x 0.125" Thickness	EJTYOXX403A2	•	Call
3.00" Diameter x 0.250" Thickness	EJTYOXX403A4		Call
4.00" Diameter x 0.125" Thickness	EJTYOXX404A2		Call
4.00" Diameter x 0.250" Thickness	EJTYOXX404A4		Call



Zinc, Zn

■ Zinc, Zn

Size	Zinc, Zn (99.994%-99.995% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJTZNXX451A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTZNXX451A4		Call
2.00" Diameter x 0.125" Thickness	EJTZNXX452A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTZNXX452A4	•	Call
3.00" Diameter x 0.125" Thickness	EJTZNXX453A2		Call
3.00" Diameter x 0.250" Thickness	EJTZNXX453A4	•	Call
4.00" Diameter x 0.125" Thickness	EJTZNXX454A2		Call
4.00" Diameter x 0.250" Thickness	EJTZNXX454A4		Call
6.00" Diameter x 0.250" Thickness	EJTZNXX456A4		Call
8.00" Diameter x 0.250" Thickness	EJTZNXX458A4		Call
Zinc, Zn (99.99% Purity)			
1.00" Diameter x 0.125" Thickness	EJTZNXX401A2	•	Call
1.00" Diameter x 0.250" Thickness	EJTZNXX401A4		Call
2.00" Diameter x 0.125" Thickness	EJTZNXX402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJTZNXX402A4		Call
3.00" Diameter x 0.125" Thickness	EJTZNXX403A2		Call
3.00" Diameter x 0.250" Thickness	EJTZNXX403A4		Call
4.00" Diameter x 0.125" Thickness	EJTZNXX404A2		Call

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Deposition Materials

Zinc Compounds

Zinc Oxide, ZnO (Bond)

Zinc Oxide, ZnO (99.999% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJZNOX501A2	•	Call
1.00" Diameter x 0.250" Thickness	EJZNOX501A4	•	Call
2.00" Diameter x 0.125" Thickness	EJZNOX502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJZNOX502A4	•	Call
3.00" Diameter x 0.125" Thickness	EJZNOX503A2	•	Call
3.00" Diameter x 0.250" Thickness	EJZNOX503A4	•	Call
4.00" Diameter x 0.125" Thickness	EJZNOX504A2	•	Call
4.00" Diameter x 0.250" Thickness	EJZNOX504A4	•	Call
Zinc Oxide, ZnO (99.9% Purity)			
1.00" Diameter x 0.125" Thickness	EJZNOX301A2		Call
1.00" Diameter x 0.250" Thickness	EJZNOX301A4	•	Call
2.00" Diameter x 0.125" Thickness	EJZNOX302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJZNOX302A4	•	Call
3.00" Diameter x 0.125" Thickness	EJZNOX303A2	•	Call
3.00" Diameter x 0.250" Thickness	EJZNOX303A4		Call
4.00" Diameter x 0.125" Thickness	EJZNOX304A2		Call
6.00" Diameter x 0.250" Thickness	EJZNOX306A4		Call
8.00" Diameter x 0.250" Thickness	EJZNOX308A4		Call



Zinc Oxide, ZnO

Zinc Oxide Aluminum Oxide, ZnO/Al₂O₃ 98/2 wt% (Bond)

Zinc Oxide Aluminum Oxide, ZnO/Al ₂ O ₃ 98/2 wt% (99.999% Purity)			
Size	Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJZNOA501A2		Call
1.00" Diameter x 0.250" Thickness	EJZNOA501A4		Call
2.00" Diameter x 0.125" Thickness	EJZNOA502A2	•	Call
2.00" Diameter x 0.250" Thickness	EJZNOA502A4	•	Call
3.00" Diameter x 0.125" Thickness	EJZNOA503A2	•	Call
3.00" Diameter x 0.250" Thickness	EJZNOA503A4		Call
4.00" Diameter x 0.125" Thickness	EJZNOA504A2		Call
4.00" Diameter x 0.250" Thickness	EJZNOA504A4		Call
6.00" Diameter x 0.250" Thickness	EJZNOA506A4		Call
7.00" Diameter x 0.125" Thickness	EJZNOA507A2		Call
7.00" Diameter x 0.250" Thickness	EJZNOA507A4		Call
8.00" Diameter x 0.250" Thickness	EJZNOA508A4		Call
Zinc Oxide Aluminum Oxide, ZnO/Al ₂ O ₃ 98/2 wt% (99.99% Purity)			
1.00" Diameter x 0.125" Thickness	EJZNOA401A2		Call
1.00" Diameter x 0.250" Thickness	EJZNOA401A4		Call
2.00" Diameter x 0.125" Thickness	EJZNOA402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJZNOA402A4		Call
3.00" Diameter x 0.125" Thickness	EJZNOA403A2	•	Call
3.00" Diameter x 0.250" Thickness	EJZNOA403A4		Call
4.00" Diameter x 0.125" Thickness	EJZNOA404A2		Call
4.00" Diameter x 0.250" Thickness	EJZNOA404A4		Call
6.00" Diameter x 0.250" Thickness	EJZNOA406A4		Call
8.00" Diameter x 0.250" Thickness	EJZNOA408A4		Call

► Zinc Compounds & Zirconium

■ Zinc Selenide, ZnSe (Bond)

Size	Zinc Selenide, ZnSe (99.995% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJ TZNSE451A2		Call
1.00" Diameter x 0.250" Thickness	EJ TZNSE451A4		Call
2.00" Diameter x 0.125" Thickness	EJ TZNSE452A2		Call
2.00" Diameter x 0.250" Thickness	EJ TZNSE452A4		Call
3.00" Diameter x 0.125" Thickness	EJ TZNSE453A2		Call
3.00" Diameter x 0.250" Thickness	EJ TZNSE453A4		Call

■ Zinc Sulfide, ZnS (Bond)

Size	Zinc Sulfide, ZnS (99.99% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJ TZNSX401A2		Call
1.00" Diameter x 0.250" Thickness	EJ TZNSX401A4	•	Call
2.00" Diameter x 0.125" Thickness	EJ TZNSX402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJ TZNSX402A4		Call
3.00" Diameter x 0.125" Thickness	EJ TZNSX403A2		Call
3.00" Diameter x 0.250" Thickness	EJ TZNSX403A4	•	Call
4.00" Diameter x 0.125" Thickness	EJ TZNSX404A2		Call
4.00" Diameter x 0.250" Thickness	EJ TZNSX404A4		Call

■ Zinc Telluride, ZnTe (Bond)

Size	Zinc Telluride, ZnTe (Grade 702) Part No.	Stocked Item	Price
2.00" Diameter x 0.125" Thickness	EJ TZNTE402A2	•	Call
2.00" Diameter x 0.250" Thickness	EJ TZNTE402A4	•	Call
3.00" Diameter x 0.125" Thickness	EJ TZNTE403A2	•	Call
3.00" Diameter x 0.250" Thickness	EJ TZNTE403A4	•	Call
4.00" Diameter x 0.125" Thickness	EJ TZNTE404A2		Call
4.00" Diameter x 0.250" Thickness	EJ TZNTE404A4		Call
5.00" Diameter x 0.125" Thickness	EJ TZNTE405A2		Call
5.00" Diameter x 0.250" Thickness	EJ TZNTE405A4		Call
6.00" Diameter x 0.125" Thickness	EJ TZNTE406A2		Call
6.00" Diameter x 0.250" Thickness	EJ TZNTE406A4		Call
7.00" Diameter x 0.125" Thickness	EJ TZNTE407A2		Call
7.00" Diameter x 0.250" Thickness	EJ TZNTE407A4		Call

■ Zirconium, Zr

Size	Zirconium, Zr (Grade 702) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJ TZRXX271A2	•	Call
1.00" Diameter x 0.250" Thickness	EJ TZRXX271A4	•	Call
2.00" Diameter x 0.125" Thickness	EJ TZRXX272A2	•	Call
2.00" Diameter x 0.250" Thickness	EJ TZRXX272A4	•	Call
3.00" Diameter x 0.125" Thickness	EJ TZRXX273A2	•	Call
3.00" Diameter x 0.250" Thickness	EJ TZRXX273A4	•	Call
4.00" Diameter x 0.125" Thickness	EJ TZRXX274A2	•	Call
4.00" Diameter x 0.250" Thickness	EJ TZRXX274A4		Call



Zinc Sulfide, ZnS



Zirconium, Zr

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Deposition Materials

➤ Zirconium Compounds

■ Zirconium Carbide, ZrC (Bond)

Size	Zirconium Carbide, ZrC (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJZRXC251A2		Call
1.00" Diameter x 0.250" Thickness	EJZRXC251A4		Call
2.00" Diameter x 0.125" Thickness	EJZRXC252A2		Call
2.00" Diameter x 0.250" Thickness	EJZRXC252A4		Call
3.00" Diameter x 0.125" Thickness	EJZRXC253A2		Call
3.00" Diameter x 0.250" Thickness	EJZRXC253A4		Call
4.00" Diameter x 0.125" Thickness	EJZRXC254A2		Call
4.00" Diameter x 0.250" Thickness	EJZRXC254A4		Call

■ Zirconium Nitride, ZrN (Bond)

Size	Zirconium Nitride, ZrN (99.5% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJZRNX251A2		Call
1.00" Diameter x 0.250" Thickness	EJZRNX251A4		Call
2.00" Diameter x 0.125" Thickness	EJZRNX252A2		Call
2.00" Diameter x 0.250" Thickness	EJZRNX252A4		Call
3.00" Diameter x 0.125" Thickness	EJZRNX253A2		Call
3.00" Diameter x 0.250" Thickness	EJZRNX253A4		Call

■ Zirconium Oxide, ZrO₂ (Bond)

Size	Zirconium Oxide, ZrO ₂ (8 wt % Y ₂ O ₃ , Fully Stabilized) (99.9% Purity) Part No.	Stocked Item	Price
1.00" Diameter x 0.125" Thickness	EJZR0X301A2		Call
1.00" Diameter x 0.250" Thickness	EJZR0X301A4		Call
2.00" Diameter x 0.125" Thickness	EJZR0X302A2	•	Call
2.00" Diameter x 0.250" Thickness	EJZR0X302A4	•	Call
3.00" Diameter x 0.125" Thickness	EJZR0X303A2	•	Call
3.00" Diameter x 0.250" Thickness	EJZR0X303A4		Call
4.00" Diameter x 0.125" Thickness	EJZR0X304A2		Call
4.00" Diameter x 0.250" Thickness	EJZR0X304A4		Call

* Partially stabilized ZrO₂ available upon request.



Zirconium Oxide, ZrO₂

► Production Materials Explained



The Kurt J. Lesker Company Materials Group serves a growing number of Production Materials customers globally. We define Production Materials customers as those using large-sized targets, usually in high volumes. We also include customers who use pounds and kilograms of evaporation materials, or those using many thermal sources for evaporation in this category. In essence, production customers are making a product for sale, instead of research- and development-type laboratory experiments.



Decorative Coatings



Electronic Coatings



Metallizing



Hard Coatings

Kurt J. Lesker Company has the equipment and capabilities to produce in high volume and customize for specific applications. From large OEM manufacturers to smaller companies-we do it all!

Because of the customer-specific nature of Production Materials, we find it necessary to be directly involved with our customers. This helps to avoid communication errors while better understanding each customer's needs. We work to review drawings with customers and develop samples for approval testing.

We pride ourselves on keeping our customers up and running, making sure they don't run out of crucial Materials products.

Production targets are available for many popular industries. We serve customers from basic metallizing through semiconductor applications.

We offer common metals, from Al to Zr; ceramics, like Al₂O₃ and ITO; and much more.

We supply evaporation materials for a wide range of industries, including optical coating, electronic device manufacture, and lighting.

Our Production Materials are designed to offer the larger package sizes and competitive prices needed within the manufacturing community. While we strive to offer a wide assortment of products, please feel free to inquire if you need a special material that is not shown.

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Deposition Materials



► Production Materials Explained

Common products we supply for production vacuum systems include Tungsten filaments and related thermal sources. We are a global leader in supplying these sources for lighting and basic metallizing markets.

We stock sources for popular systems from Leybold, Stokes, Galileo, Balzers, and more. Another strong product line is our e-beam liners, made from carbon or other metal and ceramic materials, as appropriate.

You will find all of these products and much more in stock and ready to ship to you today.



We understand that change is not easy, and we look forward to partnering together as a preferred supplier for you and your business.

Production Materials

Sputter Targets

We manufacture a wide range of target materials designed to meet the demanding needs of Production vacuum customers. We work very closely with our Production customers and have dedicated staff to make sure that you are treated with care and respect. Many times we develop custom supply chain programs with our customers, including strategic Blanket Orders, consignment inventories, and more. We offer exceptional values on metals like Al, Ti, Cr, and in organic like SiO₂ and ITO. Our manufacturing capabilities include targets up to 16" diameter or linear lengths of up to 150". Please feel free to contact us today and learn more about Lesker Materials and how we can best serve you.

Evaporation Materials

Lesker Materials also stocks a huge assortment of popular metals and in organic for e-beam and thermal evaporation. We have popular materials like Al, Cr, Ni, and more in multiple sizes and purities available for immediate shipment. The products are packaged in pound-to-kilogram quantities and offer the quality and value needed in today's competitive manufacturing environment. We have expanded our selection of Optical Materials like Ta₂O₅, SiO and more, to better serve this growing market.

Precious Metals

Our capabilities in precious metals have expanded considerably in recent years. We are now able to serve our customers with extensive inventories of precious metal finished products. We are pleased to offer 100–1,000 gram quantities from stock on Au, Pt, and Pd pellets and shot for evaporation. Lesker Materials also surpasses the competition by offering firm fixed prices at the time of order and by extending payment terms to our customers.

Thermal Sources

We are a global leader in supplying thermal sources, made from tungsten, into the metallizing market. We are able to offer all shapes and sizes to fit popular systems from Leybold, Stokes, Galileo, and more. These crucial parts are shipped from multiple locations to offer the lowest cost and fastest deliveries to our customers. We work together to develop a strategic plan tailored to meet your particular needs.

Contact Information

For inquiries regarding pure materials as sputter target or evaporation pieces, please contact KJLC's Sales Department:

Fax: 412-384-2745

Email: sales@lesker.com

Web: www.lesker.com

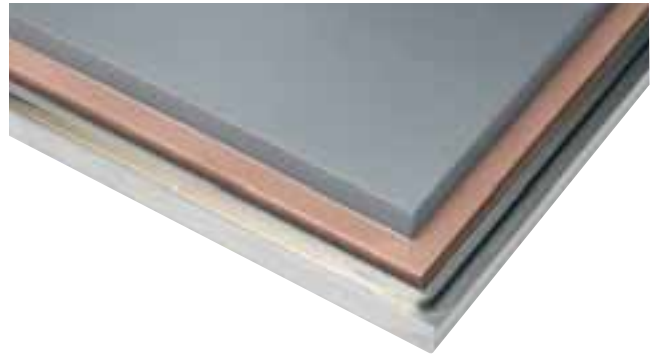
Visit our website for an online quotation at
www.lesker.com/MaterialsQuotation.cfm

► Services

■ Indium Target Bonding Service

Indium bond targets to backing plates for increased thermal conductivity under high-power inputs.

- Many sputtering processes benefit from the higher thermal and electricity conductivity
- Required for most ceramic target materials to avoid cracking from thermal shock
- Easier de-bonding and cleanup of spent materials



Property	Typical Values
Maximum Operating Temperature (°C)	150°C
Thermal Conductivity (W/mK)	83
Coefficient of Thermal Expansion (K ⁻¹)	32.1 x 10 ⁻⁶
Electrical Resistivity (ohm-cm)	8 x 10 ⁻⁶
Bond Coverage	>95%
Bond Line Thickness	0.010" +/- 0.003"

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Deposition Materials

Target Size	Target Material	Target Bonding Services	Part No.	Price
1" to 2" Diameter	Metal or Ceramic		EJBONDMET1	Call
3" to 4" Diameter	Metal or Ceramic		EJBONDMET3	Call
5" to 6" Diameter	Metal or Ceramic		EJBONDMET5	Call
7" to 8" Diameter	Metal or Ceramic		EJBONDMET7	Call
Over 8" Diameter or Linear Targets	—		—	Call

Order sputter target and bonding service together and receive a free copper backing plate for standard targets up to 4" diameter.

■ Conductive Elastomer Target Bonding Service

Conductive elastomers are used for specific materials and applications.

- Ideal for targets with low melting temperatures and reactive materials
- Offers a higher maximum temperature than indium bonding
- UHV rated

Property	Typical Values
Maximum Operating Temperature (°C)	250°C
Thermal Conductivity (W/mK)	54
Coefficient of Thermal Expansion (K ⁻¹)	2.2 x 10 ⁻⁴
Electrical Resistivity (ohm-cm)	0.0476
Bond Coverage	>98%
Bond Line Thickness	0.010" - 0.025"

Target Size	Target Material	Target Bonding Services	Part No.	Price
1" to 2" Diameter	Metal or Ceramic		EJBOND1-ELAS	Call
3" to 4" Diameter	Metal or Ceramic		EJBOND3-ELAS	Call
5" to 6" Diameter	Metal or Ceramic		EJBOND5-ELAS	Call
7" to 8" Diameter	Metal or Ceramic		EJBOND7-ELAS	Call
Over 8" Diameter or Linear Targets	Metal or Ceramic		—	Call

Order sputter target and bonding service together and receive a free copper backing plate for standard targets up to 4" diameter.

NOTE: Reference the material list in the catalogue and www.kjlc.bonding on our website for additional information and the recommended bonding method for your specific target materials. Call your sales representative for details and to order.

➤ **Services & Materials**

■ **Copper Cup Bonding**

Copper “cups” are backing plates with a raised lip around the circumference to reduce the clamping forces of the sputter gun’s hold-down ring. This method is generally used when bonding fragile targets where the pressure may crack the targets. It requires a modification of the O.D. of standard targets and specifies non-standard target part numbers.

NOTE: Reference the material list in the catalog and www.kjlc.bonding on our website for additional information and the recommended bonding method for your specific target materials. Call your sales representative for details and to order.

■ **OFHC Copper Backing Plates**

Machined from oxygen-free, high-conductivity copper.

- For regular, circular disc-type sputtering sources
- Most sputter sources, including our TORUS® 1, 2, 3 cathodes, accept a 0.125" (1/8") thick target bonded to a 0.125" thick backing plate
- For targets of other thicknesses, choose the backing plate thickness to adjust the total thickness to 0.250" (1/4") to suit most applications

NOTE: Those identified in the chart by diameter and thickness only are plain discs without through or tapped holes. They are suitable for most circular target sources from other manufacturers, although they may need minor machining for screw, clamps, etc.

OFHC Copper Backing Plates		
Size (O.D. x Thickness)	Part No.	Price
1.0" x 0.0625"	EJBPCU01A1	Call
1.0" x 0.125"	EJBPCU01A2	Call
2.0" x 0.0625"	EJBPCU02A1	Call
2.0" x 0.125"	EJBPCU02A2	Call
3.0" x 0.0625"	EJBPCU03A1	Call
3.0" x 0.125"	EJBPCU03A2	Call
4.0" x 0.0625"	EJBPCU04A1	Call
4.0" x 0.125"	EJBPCU04A2	Call
5.0" x 0.0625"	EJBPCU05A1	Call
5.0" x 0.125"	EJBPCU05A2	Call
6.0" x 0.0625"	EJBPCU06A1	Call
6.0" x 0.125"	EJBPCU06A2	Call
6.0" x 0.250"	EJBPCU06A4	Call
7.0" x 0.125"	EJBPCU07A2	Call
7.0" x 0.250"	EJBPCU07A4	Call
8.0" x 0.125"	EJBPCU08A2	Call
8.0" x 0.250"	EJBPCU08A4	Call
TORUS 10 Full (6.375" x 0.50")	EJBPT10FULL	Call
OFHC Copper Backing Plate with Drilled Steel Keeper		
1.3" x 0.125"	EJBPCU01.3K+	Call
2.0" x 0.125"	EJBPCU02K2	Call
3.0" x 0.125"	EJBPCU03K2	Call
6.0" x 0.125"	EJBPCU06K2	Call

■ **Backing Plates for OEM Sources**

For use with popular sputtering systems from OEMs, including Perkin-Elmer, MRC, and CVC

- We stock all backing plates listed below; call for availability for other sputtering system models not shown
- Models listed meet or exceed the quality and reliability of the original parts

NOTE: Please contact our Materials Department at materials@lesker.com or fax us at 412-384-2573 for pricing and availability.

Source OEM	Compatible with Model(s)	Description	Part No.	Price
Perkin-Elmer	2400/4400	Standard Copper Backing Plate for RF Magnetron	EJBPA1921001	Call
Perkin-Elmer	2400/4400	Low-Carbon Iron & Copper Backing Plate for DC Magnetron	EJBPA1928101	Call
MRC	600/900	Standard Copper Backing Plate with Removable Stainless Steel Studs	EJBPA341005	Call
MRC	8600	Stainless Steel Backing Plate	EJBPA1923602	Call
CVC	601	Enhanced Copper Backing Plate with Serpentine Water Cooling Track	EJBPCUCVC601	Call

➤ Materials

■ Conductive Elastomer Discs and Sheets

An economically attractive substitute for silver-filled pastes normally used in target bonding.

When placed between the back of a (clamped, not bonded) target and the cooling well of a magnetron sputter source, these sheets enhance thermal transfer, especially for targets that have poor thermal contact or conductance.

- Made of a vacuum-compatible 0.020" thick silicone rubber
- Contain silver-coated copper powder filler
- Reusable

SPECIFICATIONS

NASA Rating — Type A	Tensile Strength — 200 psi
Elastomer Binder — Silicone	Elongation — 100%
Conductive Filler — Silver/Copper	Tear Strength — 40 lb./in.
Volume Resistivity (as supplied) — 0.004 ohm-cm	Compression Set (70 hrs @ 100°) — 32%
Hardness — 65 Shore	Low Temp Flex — -65°C
Specific Gravity — 1.9	Max. Continuous Use Temp — 125°C

Conductive Elastomer Discs and Sheets		
Size	Part No.	Price
1.0" Diameter	EJBPEL01A	Call
25mm Diameter	EJBPEL025	Call
2.0" Diameter	EJBPEL02A	Call
3.0" Diameter	EJBPEL03A	Call
4.0" Diameter	EJBPEL04A	Call
100mm Diameter	EJBPEL100	Call
5.0" Diameter	EJBPEL05A	Call
125mm Diameter	EJBPEL125	Call
6.0" Diameter	EJBPEL06A	Call
150mm Diameter	EJBPEL150	Call
8.0" Diameter	EJBPEL08A	Call
200mm Diameter	EJBPEL200	Call
10.0" Diameter	EJBPEL10A	Call
250mm Diameter	EJBPEL250	Call
TORUS® 10E	EJBPEL110	Call
Bulk Sheet (10" x 15" x 0.02")	EJBPEL1015X2	Call

NOTE: For other sizes not listed, please contact our Materials Department at materials@lesker.com or fax us at 412-384-2573 for pricing and availability.

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■ Epoxy System for DIY Target Bonding

Our KL-325L silver-filled 2-part epoxy cement provides an economical means of bonding targets for the do-it-yourselfer.

- Economical alternative to indium or elastomer bonding—effectiveness varies with application
- Adhesion properties of glue combined with the thermal and electrical conductivity of silver
- Cure time is approximately 24 hours at 25° C
- In-vacuum use recommended at medium vacuum pressure ranges (10⁻³ Torr and above)

SPECIFICATIONS

Epoxy — KL-325K	Pot Life @ Room Temperature — 1–2 hrs
Uncured Resin — Silver Paste	Cure Cycle (After Mixing) — 18hr @ 25° C; 2hr @ 60° C
Volume Resistivity @ 25° C — 0.001 ohm-cm @ 100° C — N/A	Thermal Conductivity cal/sec/cm ² /°C/cm — 25 x 10 ⁻⁴
Tensile Shear @ 25° C — 1,200–2,500 psi	Coeff. of Expansion cm/cm/°C — N/A
Shelf Life @ Room Temperature — 4–5 mo	Working Temperature — -60° C to 175° C

Silver Vacuum Epoxy for Target Bonding		
Description	Part No.	Price
Silver Vacuum Epoxy	KL-325K	Call

■ Silver-Filled Paste

Made specifically for sputter targets.

This viscous sealant fills small scratches and surface imperfections better than indium foil, often dramatically improving target cooling.

- A mixture of low vapor pressure vacuum fluid and silver powder
- Combines excellent thermal/electrical conductive properties with high vacuum compatibility
- No silicone-based material
- Does not harden

SPECIFICATIONS

Operating Range — 10°C–160° C	Density — 1.97 g/cc
Vapor Pressure @ 20° C — 2 x 10 ⁻⁹ Torr	Color — Gray

- Can be removed with methanol or acetone to leave a virtually contamination-free surface
- Its electrical conduction makes it perfect for DC sputtering

Contents:

- Each jar contains sufficient paste to coat a 5" x 15" rectangle or a 10" diameter circle
- Includes utensils for applying and spreading the paste

DIRECTIONS: Apply the silver-filled paste to the contact surfaces between the back of the sputter target and cooling plate.

Silver-Filled Paste			
Description	Size	Part No.	Price
Silver-Filled Paste	50 g Jar	EJAGPASTE50G	Call

NOTE: Do not use silver-filled paste on ceramic or porous metal targets.

Deposition Materials