

August 6, 1940

Brush Beryllium Corporation
5714 Chester Avenue
Cleveland, Ohio

Gentlemen:

For certain experiments which will probably be conducted at the Pupin Physics Laboratories at Columbia University, we would require a large quantity of beryllium oxide. It is essential for our experiments that the density of the oxide should be as high as possible and we would either have to compress the fluffy material so as to obtain a density of between 2.5 and 3. grams per c.c., or we would have to use sintered beryllium oxide.

The purpose of this letter is to find out whether you can supply sintered beryllium oxide and if so, what the price per pound would be in 100 lb. lots. In your reply will you be kind enough to give the density of the material you are able to supply?

If you are not able to supply dense material will you then please quote fluffy beryllium oxide and state whether this material can be compressed at high pressure so as to reach a density of about 2.5?

Kindly address your reply to me c/o the Pupin Physics Laboratory, Columbia University, New York.

Yours truly,

(Leo Szilard)

THE BRUSH BERYLLIUM COMPANY

3714 CHESTER AVENUE

CLEVELAND, OHIO

CABLE ADDRESS
BRUSH CLEVELAND

HENDERSON 1064

August 8-1940

Mr. Leo Szilard,
Pupin Physics Laboratories,
Columbia University,
New York City, N. Y.

Dear Sir:

This is a reply to your letter dated August 6, 1940 in regard to Beryllium oxide.

We can supply Beryllium Oxide either the fluffy or sintered grades, but according to your inquiry we believe you are more interested in the sintered grade. We are therefore sending you under separate cover a sample of this material, which is calcined at near the melting point and has a Bulk density of 0.9 plus or minus and a true density of approximately 3.0. Beryllium Oxide fluffy type sells in small quantities at \$7.00 per lb., less 15%, and the sintered grade in small quantities sells at \$6.95 per lb. Our price is f. o. b. Cleveland, Ohio.

Before quoting on larger amounts we would prefer having you try smaller lots to see if this oxide meets with your requirements. If it is within reason may we inquire as to the nature of your experiment, as we may be able to make suggestions.

Thanking you for your interest and looking forward to hearing from you again, we remain

Yours very truly,

THE BRUSH BERYLLIUM COMPANY.

R. W. Cobb
R. W. Cobb.

RWC/GG

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FIRST VICE-PRESIDENT

Send the following message, subject to the terms on back hereof, which are hereby agreed to

To The Brush Beryllium Company October 10 1940
 Street and No. 3714 Chester Avenue
 Place Cleveland, Ohio

RESPONDING TO MR CORBS LETTER DATED OCTOBER 5 WOULD
 APPRECIATE RECEIVING SAMPLES OF ONE OR TWO POUNDS
 BOTH OF SINTERED AND FINELY GRAINED OF BERYLLIUM OXIDE
 LEO SZILARD

L. Szilard, 420 West 116th Street UN 4-2700

WHEN YOU
Travel
 SEND
 WESTERN UNION
TOURATE
 TELEGRAMS
Only
35^c ANYWHERE
 FOR FIRST 15 WORDS
*Additional words for
 a few cents more*

Sender's address
for reference

Sender's telephone
number

THE BRUSH BERYLLIUM COMPANY

3714 CHESTER AVENUE

CLEVELAND, OHIO

HENDERSON 1064

CABLE ADDRESS
BRUSH CLEVELAND

November 13, 1940.

Mr. Leo Szilard,
c/o Pupin Physics Laboratory,
Columbia University,
New York City.

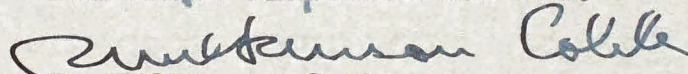
Dear Mr. Szilard:

In response to your letter, dated November 5, 1940, we are pleased to quote you Beryllium metal, 96 per cent pure, in lots of 10 pounds, at the rate of \$47.00 a pound F.O.B. Cleveland, Ohio. This material is in lump form but at the present time we can make you no delivery promise.

Thanking you for your interest in our products, we remain

Very truly yours,

THE BRUSH BERYLLIUM COMPANY.


R. Wilkinson Cobb.

RWC:CN

September 12, 1941

Mr. Leon Fletcher, Jr.,
c/o The Brush Beryllium Company
3714 Chester Avenue
Cleveland, Ohio

Dear Mr. Fletcher:

Confirming my telephone conversation with you, I wish to repeat that we will be very grateful if you could supply us with two (2) identical cylindrical beryllium blocks. Each block should be four centimeters (4 cm.) high, have a diameter of eight centimeters (8 cm.), and have an axial hole of three centimeters (3 cm.) in diameter going all the way through.

We need these two beryllium blocks for work which is being carried out by Columbia University for the Government, and we would very much appreciate it if we could obtain these blocks within two weeks. A University Order will be sent to you within a few days, but perhaps you could give instructions for making these blocks without awaiting the receipt of the order, in order to speed up delivery.

A separate letter will be written about the rectangular beryllium blocks of which I also spoke to you over the telephone.

Very truly yours,


(Leo Szilard)

LS:MEB

Copies

1 Pogram
1 Fermi
1 Szilard ✓
2 Mitchell

Copy

Copy

THE BRUSH BERYLLIUM COMPANY
3714 Chester Avenue
Cleveland, Ohio

September 23, 1941

Dr. Dana P. Mitchell
Physics Building
Columbia University
538 West 120th Street
New York, New York

Dear Dr. Mitchell:

We have analyzed turnings from the castings which we mailed last night. The analysis shows the following impurities:

0.01% Si
0.02% Mg
0.16% Al
0.17% Fe

Very truly yours,

THE BRUSH BERYLLIUM COMPANY

(signed)

Leon Fletcher, Jr.

LF:AH

Copies to: Pegram
Szilard ✓
Fermi
Mitchell - 2

C
O
P
Y

THE BRUSH BERYLLIUM COMPANY
3714 Chester Avenue, Cleveland, Ohio

October 1, 1941

Dr. D. P. Mitchell
Physics Building
Columbia University
538 West 120th Street
New York, New York

Dear Dr. Mitchell:

We manufacture for the fluorescent light industry a so-called GC grade of beryllium oxide. We dissolve our beryllium sulphate, which is already of a relatively high purity, treat it with hydrogen sulphide to remove the heavy metals and recrystallize it in glass. We then fire it in batch furnaces.

By chemical methods we are unable to detect any impurities in the GC oxide with the exception of Fe. As stated in my letter of August 4th, the Fe content generally runs between .001% to .003%, although at times it does contain as much as .006%. About a year ago a spectroscopic analysis was made on six samples and they showed traces of the following impurities:

Al, Cu, Si, Mg, Ca and Fe.

As far as the beryllium plates are concerned, at this time I cannot estimate a maximum amount of each of the impurities to be expected. We shipped Dr. Allison 8 lbs. of plates and are analyzing samples from them, but the analyses have not been completed.

Very truly yours,

(Signed) Leon Fletcher, Jr.

THE BRUSH BERYLLIUM COMPANY

IF:AH

Copies

1 Pegram
1 Fermi
1 Szilard ✓
2 Mitchell

CLASS OF SERVICE DESIRED	
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\$ \$ F	CHECK
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Send the following telegram, subject to the terms on back hereof, which are hereby agreed to

To Dr. C. B. SAWYER July 29, 1942

Care of or Apt. No. BRUSH BERYLLIUM COMPANY

Street and No. 3714 CHESTNUT AVENUE

Place CLEVELAND, OHIO

CONFIRMING APPOINTMENT WITH YOU IN CLEVELAND TOMORROW THURSDAY MORNING.

L. SZILARD

Metallurgical Laboratory

University of Chicago

WANT A REPLY?

"Answer by WESTERN UNION"
or similar phrases may be
included without charge.

Sender's address
for reference

Sender's telephone
number