

Date: 05.04.2024

Certificate of Analysis No.: 0004890

Goods:

Copper Powder, lot #0205/Cu

Quantity: 1340 kg* in 81 boxes*

Sample: 10g taken by IGAS research from 3 glass ampoules (out of boxes 05, 49, 95, acc. to information by customer)

* Net weight acc. to information given by customer

Measured with ICP-OES.
Result of Analysis

Element	Measured Value [ppm]
Ag	7
Al	<1
As	2
Au	<1
B	1
Ba	<1
Be	<1
Bi	<1
Ca	<1
Cd	<0,5
Co	<1

Element	Measured Value [ppm]
Cr	<1
Fe	<1
Hg	<1
K	<1
Li	<1
Mg	<1
Mn	<1
Mo	<1
Na	2
Ni	<1
P	3

Element	Measured Value [ppm]
Pb	<1
Pd	<1
Rb	<1
S	33
Sb	1
Sn	<0,5
Sr	<1
Ti	<0,5
V	<0,5
Zn	<1
Zr	<0,2

The chemical purity, calculated taking into account the elements Al, Be, Cd, Fe, Mg, Mo, Ni, Pd, Rb, Sb, Ti and Zn (acc. to "TU 1793-011-50316079-2004" and "TU 24.44.21-002-75815004-2022") is

99,9999%

The isotopic composition of this sample is that of natural copper:

⁶³Cu 69.1% ±0.05 % and ⁶⁵Cu 30.9% ±0.05 %

The material is not radioactive!

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BIC (Swift): GENODEF10HA

Goslar, 05.04.2024

IGAS research No. 0004890

"Copper Powder"
ex Lot #0205/CU

Investigation of Particle Size and Shape

with a

Scanning Electron Microscope (SEM)

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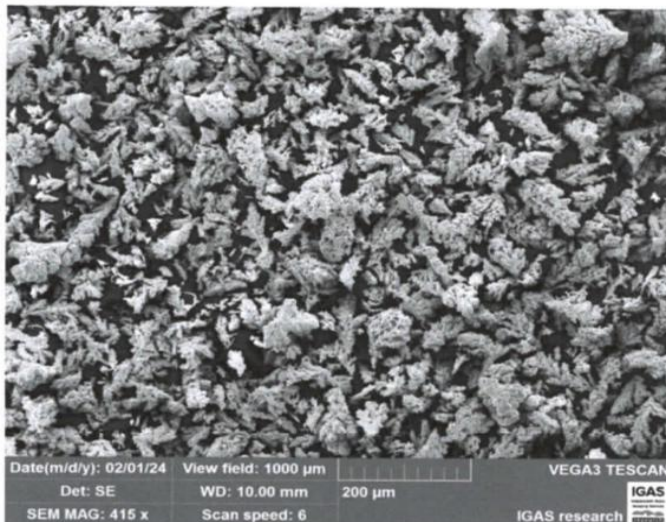


Fig Overview,
the view field is 1 mm.

The picture shows
agglomerates of copper
powder. Some of those
are quite compact others
have a more filigree
structure.

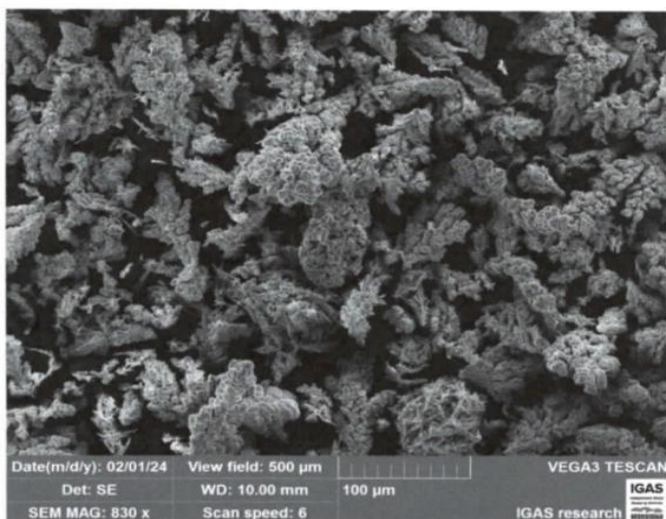


Fig 2: Overview shot. The
view field is 0,5 mm, the
scale is 1 mm (0,1 mm).

The photograph shows a
variety of agglomerates
generally made up of
particles <15 µm, only very
few are made up of
larger structures (>15µm -
c. 3 µm).

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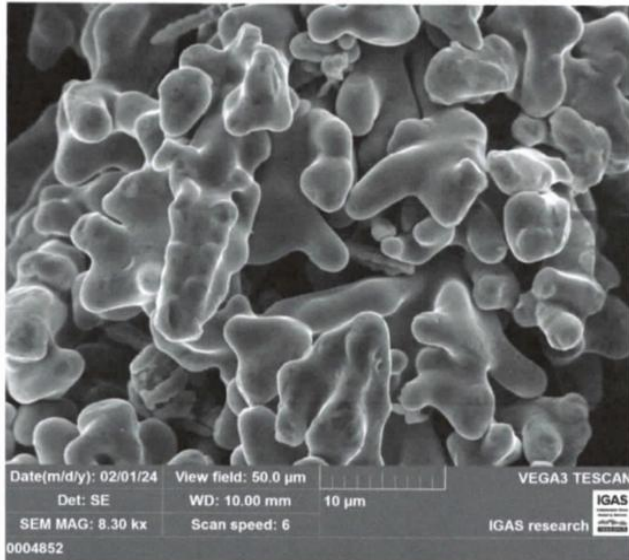


Fig 5: Copper powder, detailed view of agglomerates.

The image width corresponds to 0,05 mm.

The picture reveals the presence of small primary structures ($<2\mu\text{m}$) besides the majority of larger particles (diameter $<<10\mu\text{m}$).

The sample was taken from Lot #0205/Cu. The SEM analyses show that this material is made up of agglomerates of copper powder with a filigree structure, having particle widths of generally $<10\mu\text{m}$. Prior to certain industrial use this powder might need treatment by means of strong ultrasonic, aiming to disintegrate the agglomerated structures.

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ASTE Group Swiss AG, based in Langmatt, 6370 Stans, Switzerland, duly represented by Mr. Valter Polencic

To whom it is due

Subject: Copper 99,999%

Hereby, the company ASTE Group Swiss AG, based in Langmatt, 6370 Stans, Switzerland, duly represented by Mr. Valter Polencic.

That the copper isotope in nano spheres Cu65 with purity 99.999% offered for sale, entered Switzerland in several lots, from the year 2006 to the year 2013 and is currently deposited at the Security Warehouse Cosmotrans AG, at Freeport Embrach-Embraport.

Furthermore, **ISE AG** (Commercial register number: CHE-456-752-545) with the address: Furrengasse 21, 6004 Lucerne, Switzerland, Phone +41 41 5 11 11 20, mail: info@ise-ag.com confirm with this chart the longterm price



Stamp and signature

Date: 26.08.2024

Valter Polencic


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