

## High Purity

Salman electrolytic copper powders high purity and thus show best conductivity (electrical and thermal).

## Lead free

Due to highly pure raw materials and as we do not use any lead in our process, we can guarantee extremely low lead contents of < 20ppm.

## Excellent mixing properties

The dendritic structure makes our electrolytic copper powders very suitable for mixing with other powders (e.g. with graphite powders, tin powders, hard metal powders, cobalt powders, ...). Especially fine powders and/or powders with higher specific density can be kept between dendrite arms.

## Excellent pressing properties

With electrolysis there is no quenching of a melt and the free growing of dendrites according to crystallographic orientations forms a rather soft material suitable for pressing. The dendritic structure leads to a clamping effect, so high green strength can be obtained.

## Excellent sintering properties

Due to the high surface our electrolytic copper powders have a high sinter activity and starting with high green strength also high sintered strengths can be achieved. In sintering mixtures (e.g. 90%Cu + 10%tin) the dimensional change of the sintered part during sintering can be adjusted by the use of electrolytic copper powders.

## Applications

- Carbon brushes
- Brake and friction lining
- Sintering for bronze parts
- Additives for sintering of iron powder / mixtures
- Brazing and joining
- Welding electrodes
- Diamond tools
- Chemical industry
- Plastic fillers
- Vacuum switches
- Spark plugs
- Pyrotechnics

## electrolytic copper powders



Salman electrolytic copper powders has a dendritic morphology and a very high chemical purity. The apparent density of these powders is light ( $0.7 - 1.2 \text{ g/cm}^3$ ), medium ( $1.3 - 1.9 \text{ g/cm}^3$ ) And high ( $2.0-3.0 \text{ g/cm}^3$ ).

Product name	electrolytic copper powders
Product Code	Cue-40, Cue-41, Cue-42, Cue-43, Cue-44, Cue-45
Chemical Composition (%)	Cu 99.5% min
apparent density	$0.7 - 3.0 \text{ g/cm}^3$
Max oxygen [w%]	$0.5 - 0.07 \%$
Particle size range	$<10 \mu\text{m}$ , $<25 \mu\text{m}$ , $<45 \mu\text{m}$ , $<63 \mu\text{m}$ , $<80 \mu\text{m}$

