

Cuprous Oxide Nanoparticles CONP102

Description:

Cu₂O nanoparticles is an important metal-oxide p-type semiconductor with a direct small band gap of 2.17 eV, which makes it a promising material for the conversion of solar energy into electrical or chemical energy. In addition to this, it is used in applications such as: photo catalysis, Lithium ion batteries, optoelectronic and gas sensors. Cuprous oxide is commonly used as a pigment, a fungicide, and an antifouling agent for marine paints.

Characterization	
CAS	1317-39-1
Stock No.	CONP102
Molecular formula	Cu ₂ O
Molecular weight (g/mol)	143.09
Form	Powder
Color	Orange
Morphology	Nearly spherical
Crystal structure	SC
Size range(>95%, nm)	50-100
Total impurity (%)	N/A
Solubility	Insoluble

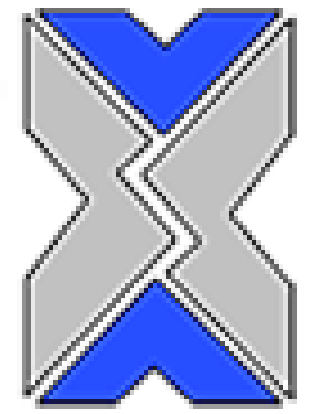
Note: product specifications are subject to amendment and may change over time.



Image of cuprous oxide nanopowder
(CONP102)

Safety:

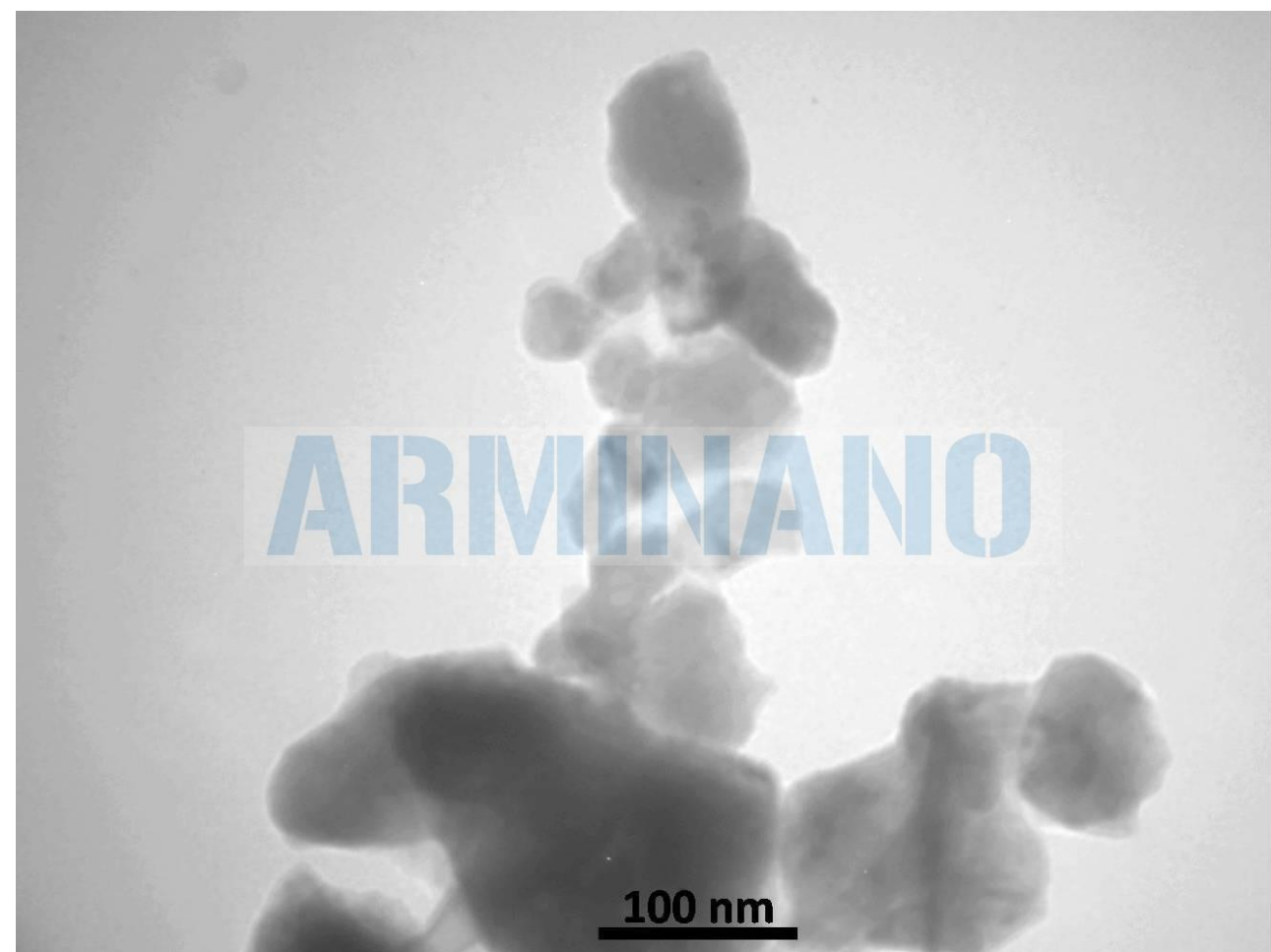
Avoid breathing dust.
Always use protective gloves and safety glasses.
Wash with soap and water after exposure.
Refer to MSDS prior to handling this material.



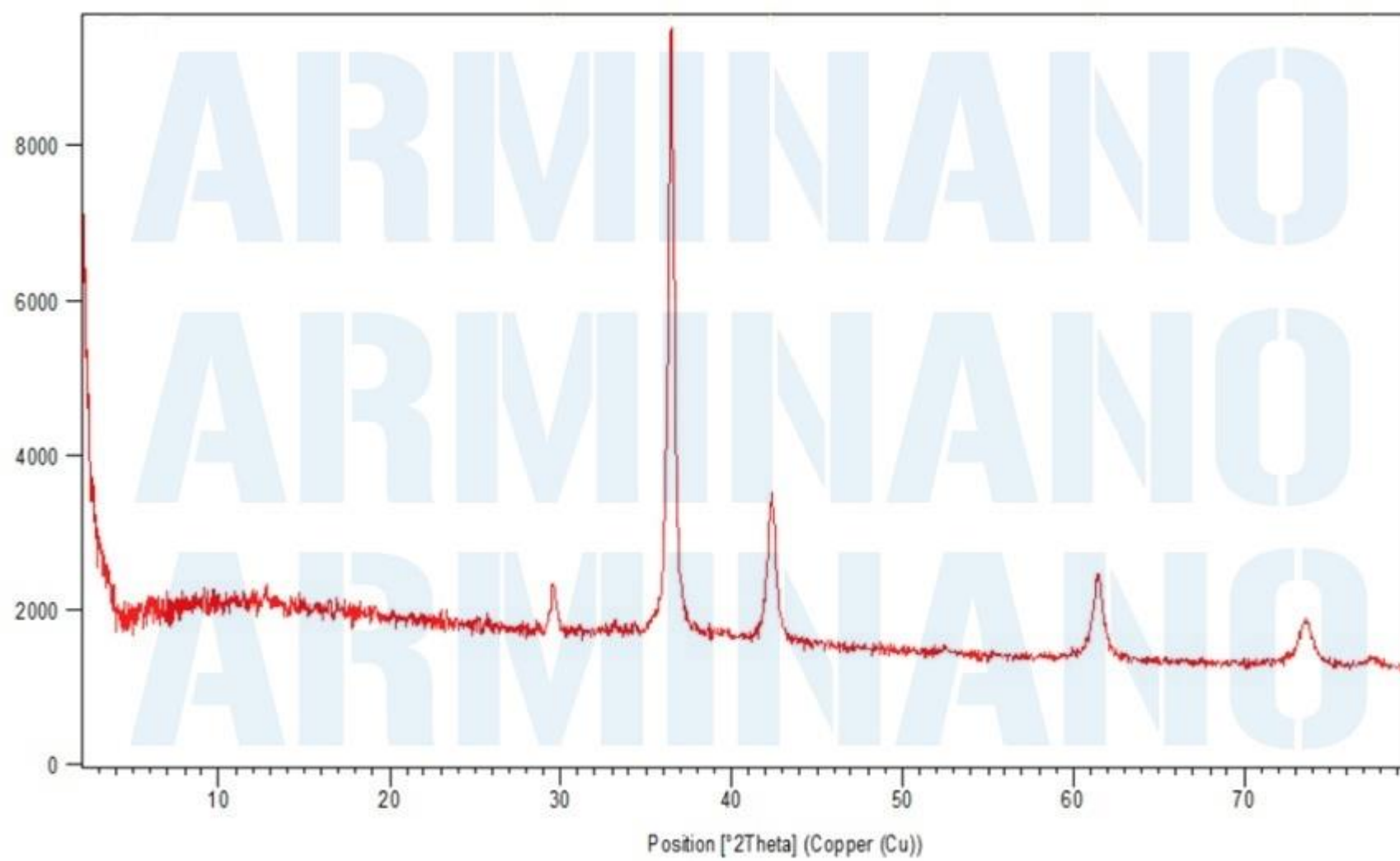
Cuprous oxide Nanoparticles CONP102



SEM image of CONP102



TEM image of CONP102



XRD pattern of CONP102

Storage:

- Keep it in cool dry place.
- Avoid direct sunlight.
- Do not freeze.
- To disperse powder use sonication.

Shelf life:

When stored as specified the product is stable for at least 6 months.