

# Copper(II) carbonate basic nanorods

#### ■ Product introduction

Product description: Nano cupric carbonate basic;

Nano basic copper carbonate; Nano malachite.

CAS no.: 12069-69-1

Product specification: Diameter 20~40nm; Length100~200nm

#### Product explanation

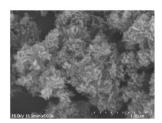
Molecular formula: CuCO<sub>3</sub>.Cu(OH)<sub>2</sub>

Molecular weight: 221.12

Physic-chemical Properties: Light blue fine powder, with density of 3.85.

Insoluble in unboiled water or alcohol, and dissolved in acid to form the corresponding copper salts, soluble in cyanide, sodium hydroxide, aqueous solution of alkali carbonate to form a case of copper complex. Brown copper oxide will be produced when it boiled in alkali metal carbonate solution. Unstable in the hydrogen sulfide. Become more than a dozen chemical compound when in different ratio according to CuO:CO<sub>2</sub>:H<sub>2</sub>O. The molecular formula is CuCO<sub>3</sub>.Cu(OH)<sub>2</sub>.XH<sub>2</sub>O in industry manufacturing.

The solubility in water is 0.0008%.





Product use: As continuously added copper source of PCB plating; new pollution-free fungicides and also for analysis reagents. To produce varied copper compound in inorganic salt industry, as organic synthesis catalyst in organic industry, as copper additive in electroplated Cu-Sn alloy coating industry and desulfurizer in crude oil storage, which is widely used in wood preservation within these years.

Packing, storage and shipping: Aluminum foil & carton packaging, 2kg, 10kg, 20kg. Sea packaging. Store in a cool &dry place. Keep dry in transit.

Executive standard: Enterprise standard

# Quality standard

Item	Purity (%)	Diameter (nm)	Length (um)	Shape	Specific surface area (m²/g)	Density (g/cm³)
Index	99+	20~40	0.1~0.2	nanorod	20~50	0.1~0.5



# Ultrafine cupric carbonate basic -

#### ■ Product introduction

Product description: Ultrafine cupric carbonate basic;

Superfine copper carbonate; Superfine basic copper carbonate; Superfine malachite.

CAS no.: 12069-69-1

Product Specification: 5000meshes

## ■ Product explanation

Molecular Formula: CuCO<sub>3</sub>.Cu(OH)<sub>2</sub>

Molecular weight: 221.12

Physic-chemical Properties: Light blue fine powder, with density of 3.85.

Insoluble in unboiled water or alcohol, and dissolved in acid to form the corresponding

copper salts, soluble in cyanide, sodium hydroxide, aqueous solution of alkali carbonate to form a case of copper complex. Brown copper oxide will be produced when it boiled in alkali metal carbonate solution. Unstable in the hydrogen sulfide. Become more than a dozen chemical compound when in different ratio according to CuO: CO<sub>2</sub>: H<sub>2</sub>O and the molecular formula is CuCO<sub>3</sub>.Cu(OH)<sub>2</sub>,XH<sub>2</sub>O in industry manufacturing. The solubility in water is 0.0008%.

Product Use: As continuously added copper source of PCB plating; new pollution-free fungicides and also for analysis reagents. To produce varied copper compound in inorganic salt industry, as organic synthesis catalyst in organic industry, as copper additive in electroplated Cu-Sn alloy coating industry and desulfurizer in crude oil storage, which is widely used in wood preservation within these years.

Packing, storage and shipping: Aluminum foil and carton packing, each bag of 2kg, 10kg, or 20kg.

Seal packaging. Store in a cool&dry place. Keep dry in transit.

Executive standard: Enterprise standard

### Quality standard

Item	Cu (%)	D50 (µm)	Specific surface (m²/g)	area		ensity /cm³)	Ac	id-insoluble (%)	
Index	55min	2.6	2~30		0.2	2~0.8		0.05max	
Others	CI (%)	Fe (%)	SO₄ (%)	N (%		Pb (%)		As (%)	
Index	0.05max	0.05max	0.05max	0.01r	max	0.006	max	0.003max	-





## Copper(II) carbonate basic -

#### ■ Product introduction

Product description: Cupric carbonate basic; Copper carbonate; Basic copper carbonate; Malachite

CAS no.: 12069-69-1

Product specification: Industrial grade

### ■ Product explanation

Molecular formula: CuCO<sub>3</sub>.Cu(OH)<sub>2</sub>

Molecular weight: 221.12 Physic-chemical Properties:

Peacock green tiny amorphous powder. The density is 3.85, and melting point 200 degrees. Insoluble in unboiled water or alcohol, and dissolved in acid to form the corresponding copper salts, soluble in cyanide, sodium hydroxide, aqueous solution of alkali carbonate to form a case of copper complex. Will produce brown copper oxide when boiled in alkali metal carbonate solution, and



dissolved to black copper oxide at 2000°C. Unstable in the hydrogen sulfide. Become more than a dozen chemical compound when in different ratio according to CuO:CO<sub>2</sub>:H<sub>2</sub>.and the molecular formula is CuCO<sub>3</sub>.Cu(OH)<sub>2</sub>.XH<sub>2</sub>O in industry manufacturing. The solubility in water is at 0.0008%, and with low toxicity when under decomposition temperature of 200-2200°C.

Product use: Used as analytical reagents, to produce varied copper compound in inorganic salt industry, as organic synthesis catalyst in organic industry. as copper additive in electroplated Cu-Sn alloy coating industry and desulfurizer in crude oil storage, which is widely used in wood preservation.

Packing&storage: By plastic woven bag or cardboard bag with inner plastic bag, net weight 25kg or 50kg for

each bag. Stored in a ventilated and dry warehouse. Keep dry in transit. Water and fire extinguishe can save when caught fire.

Executive standard: G/321283GY03-2002 Enterprise standard

### Quality standard

Cupric Carbonate Basic	Industrial grade	Plating grade	Reagent grade
Item	Index	Index	Index
Content(%)	98.0	98.0	99.0
Content (Cu calculation) % ≥	55.0	55.0	56.0
Chloride (CI) % ≤	0.20	0.01	0.001
Sulfate (SO₄) % ≤	<del></del>	0.02	0.01
Nitrate (NO₃) % ≤			0.03
Ammonium(NH₄) % ≤		0.20	0.10
Fe % ≤	0.10	0.30	0.001
As % ≤		0.002	0.001
Cr % ≤		0.005	0.003
Pb % ≤		0.005	0.003
Cd % ≤		<del></del>	0.0006
Fineness(meshes)	100	100	200