



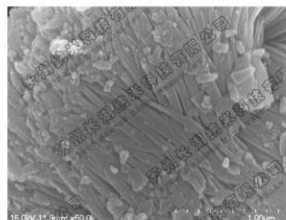
Basic copper sulfate nanosheet

Product introduction

Product description: Tri-basic copper sulfate nanosheet;
Copper sulfate basic nanobelts;
Fixed copper nanoribbon; Nano TBCS;
Nano cupric sulfate basic;
Nano bordeaux mixture composition.

CAS no.: 1344-73-6

Product specification: Thickness 10~30nm



Product explanation

Molecular formula: $\text{CuSO}_4 \cdot 3\text{Cu}(\text{OH})_2 \cdot \text{H}_2\text{O}$

Molecular weight: 470.29

Physic-chemical Properties: Green or light green powder. Insoluble in water and organic solvents, soluble in dilute acid and ammonia, and stable in the air.

Product use: Main composition of bordeaux mixture; needn't smash, can configure directly into bordeaux mixture and bactericidal effect is much better than common bordeaux mixture. Pesticide intermediates, pharmaceutical intermediates, feed additives, wood preservation, supplements of efficient copper.

Packing, storage and shipping: Aluminum foil & carton packaging, 2kg, 10kg, 20kg. Seal 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 (m ² /g)	Density (g/cm ³)
Index	99+	10~30	1~2	Nanosheet	10~30	0.1~0.5

Cupric sulfate, pentahydrate

■ Product introduction

Product description: Blue vitriol; Salzburg vitriol; Copper sulfate crystal.
CAS no.: 7758-99-8
Product specification: Plating grade, electronic grade

■ Product explanation

Molecular formula: $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$

Molecular weight: 249.68

Physic-chemical Properties: Blue transparent crystals. Easily airslake in dry air. The relative density is 2.29 will become three water salt when heated to 30°C , one water salt when heated to 190°C , and white salt powder without water when heated to 258°C . Insoluble in water, methanol, glycerin, slightly soluble in ethanol. Harmful if swallowed. Irritating to respiratory system and skin.

Product Use: As analytical reagent and nitrogen catalyst, for testing sulfur glycosides by thin layer chromatography method and testing amino acid by polarograph method. Also as mordant and preservatives, for copper salt synthesis, pesticides, pharmaceuticals, and battery manufacturing.

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 extinguisher can save when caught fire.

Executive standard: HG/T 3592-2010 Enterprise standard



■ Quality standard

Copper sulfate crystal	Superior grade (Plating grade)	First grade (Plating grade)	Electronic grade
Item	Index	Index	Index
Content ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$) % \geq	98.0	98.0	99.0
Insoluble matter in water % \leq	0.005	0.01	0.005
Chloride (Cl) % \leq	0.002	0.01	0.0015
PH value (5% solution, 20 degree)	3.5~4.5	3.5~4.5	3.5~4.5
Ca % \leq	0.005	--	0.005
Co % \leq	0.0005	0.005	0.0005
Fe % \leq	0.002	0.005	0.001
Ni % \leq	0.0005	0.005	0.0005
Zn % \leq	0.005	0.005	0.001
As % \leq	0.0005	0.001	0.0005
Pb % \leq	0.001	0.005	0.001



Copper sulfate basic

Product introduction

Product description: Tri-basic copper sulfate; Copper sulfate basic;
Fixed copper; TBCS; Cupric sulfate basic.

CAS no.: 1344-73-6

Product specification: Industrial grade

Product explanation

Molecular formula: $\text{CuSO}_4 \cdot 3\text{Cu}(\text{OH})_2 \cdot \text{H}_2\text{O}$

Molecular weight: 470.29

Physico-chemical Properties: Green or light green powder. Insoluble
in water and organic solvents, soluble
in ammonia and acid, stable in the air.

Product Use: Pesticide intermediate, medical intermediate, feed
supplement, wood preservation, efficient copper source supplements.

Packing, storage and shipping: Plastic woven bag or cardboard with inner plastic bag, net weight of
each bag 25kg or 50kg. Stored in a ventilated and dry warehouse.
Keep it dry in transit.

Executive standard: Enterprise standard



Quality standard

Copper sulfate basic	Industrial grade	Pesticide grade	Medical grade	Reagent grade
Item	Index	Index	Index	Index
Copper sulfate basic % \geq	96.0	97.0	98.0	99.0
Content(By Cu) % \geq	52.5	53.0	53.0	53.5
Acid insoluble matter % \leq	--	0.20	0.05	0.01
Cl % \leq	--	--	0.05	0.005
NO_3 % \leq	--	--	0.005	0.001
Fe % \leq	--	0.05	0.005	0.003
Ni % \leq	--	0.05	0.001	0.0005
Cr % \leq	--	0.05	0.0005	0.0003
As % \leq	--	0.005	0.001	0.0005
Pb % \leq	--	0.005	0.001	0.0005
Hg % \leq	--	--	0.0001	0.00005
Fineness(meshes) \leq	--	100	200	--

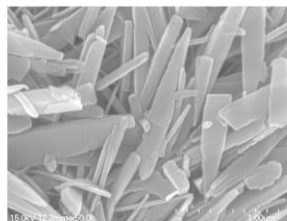
Supported copper sulfate basic nanobelts

Product information

Product description: Supported copper sulfate basic nanobelts;
Supported nano cupric sulfate basic;
Nano bordeaux mixture composition.

CAS no.: 1344-73-6

Product specification: Thickness: 10~50nm; Diameter: 1~2μm



Product introduction

The supported nano raw pesticide is specially developed for copper preparations, including copper sulfate and carrier. The carrier was added when processed copper preparations, and no need to add again in the post processing of copper compounds. The shape is nanobelt or nanosheet, with nano material characteristics of macroeffect, quantum tunneling effect and surface effect, having advantage of stronger bactericidal power, higher suspensibility, better adhesion and longer pesticide effect. Combining with nano technology can greatly improve the quality of copper preparations.



Product explanation

Molecular formula: $\text{CuSO}_4 \cdot 3\text{Cu}(\text{OH})_2 \cdot \text{H}_2\text{O}$ and carrier

Appearance: Green or light green powder. Insoluble in water.

Product use: For nano wettable powder synthesis, no need to smash and process.

Packing, storage and shipping: Kraft or Paper barrel sealed packaging. To store in a cool & dry place.

Quality standard

Model	$\text{CuSO}_4 \cdot 3\text{Cu}(\text{OH})_2 \cdot \text{H}_2\text{O}$ (%)	Carrier content (%)	Thickness (nm)	Length (μm)	Shape	Specific surface area (m ² /g)	Density (g/cm ³)
A	90	10	10~50	1~2	Nanosheet	10~30	0.1~0.5
B	80	20	10~50	1~2	Nanosheet	10~30	0.1~0.5
C	70	30	10~50	1~2	Nanosheet	10~30	0.1~0.5