

Copper KCMs

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The highly breathable KCM (KCM) is made of 99.95% pure copper mesh that sanitizes and filters the air you breathe. The copper mesh filters out pollens and other impurities.

The KCM is reusable, self-disinfecting, and water-resistant. Washing is unnecessary, unless the mask is visibly soiled. (See below Cleaning Procedure) Totally unique, the KCM deposits nano particles of copper into the nose. Published reports have proven that copper inactivates most corona viruses, flu, and other respiratory viruses, and kills bacteria on contact. Inactivation makes the virus unable to infect, making them harmless. Copper has anti-inflammatory properties, as well. The KCM is sturdier (0.6 oz) than a standard surgical mask (0.2 oz) and is meant to be worn multiple times over several months versus a surgical mask, which is meant to be worn only once.

The KCM has a 30% open weave, ensuring a comfortable wearing experience and easy breathing, without becoming too warm or fogging glasses. The mask is made of a “see through” mesh, but is water-resistant. Water droplets at low pressure are repelled. (Fig 3) Water resistance can help repel droplets expelled by sneezing. (Fig 4).



Fig 3 Mesh is water-resistant. Water beads up.

Fig 4 A sneeze can propel particles more than 20 feet
<https://en.wikipedia.org/wiki/sneeze>

PACKAGE CONTENTS:

- Instructions
- One KCM to cover the nose and mouth (Fig 1, 2) (Specify black or beige in your order)
- One inch sq. copper mesh patch for allergy and sensitivity testing. (See precautions)
- One piece of moleskin (only in moleskin lined masks)
- Small blue desiccant pack, a drying agent (Intertek Packaging)
- Plastic bag

MATERIALS: The main structural component of the KCM is 99.95% pure copper mesh. The ear loops are made of polyester and spandex (no latex). For increased comfort, the edges are lined with either black nylon or beige moleskin.

INSTRUCTIONS: Read all enclosed directions before use. One size fits most. For adult use only. The KCM is recommended to be used by a single person, unless sterilized. (See Cleaning Procedure below)

If you wear eyeglasses, remove them before applying the KCM. Place ear loops over your ears to secure the KCM to face. Gently squeeze the KCM over the bridge of nose to create a closer fit. (Do not pinch, as this may cause a tear.) The bottom edge should rest on the chin, beneath the lower lip. To fit mask to your face, insert index fingers beneath the sides of mask and pull forward. Using the middle fingers and thumbs, pinch the sides to form small pleats. This will snug the mask to your face. If ear loops are too loose, tighten with a slipknot (See videos Mask Fitting and Adjusting ear loops.)

If whiskers or stubble penetrate the mesh mask and cause an uncomfortable sensation, shave before use or wear a Kuhn Copper Mesh Insert under a surgical mask.

RECOMMENDED USES FOR the KCM: When breathing sanitized and filtered air is important. Protect yourself and others. Careful use only when needed will help ensure that copper will remain effective for many months. For other examples of uses and reviews, see Kuhncoppersolutions.org User Comments.

Examples Only

General population during flu season	Nursing home clients and staff
Travelers (plane, train, bus, cruise ship)	Immunosuppressed patients
People with environmental allergies, pollen allergies.	Patients visiting a doctor’s office
Hospital personnel not exposed to blood or bodily fluids.	First responders
People exposed to Red Tide	



Fig 5 KCM: Use in crowded airplanes or buses

<https://unsplash.com/photos/tTfDMaRq-FE>

Photo by Subyeon Choi on Unsplash

RESPIRATORY INFECTIONS:

Wear the mask:

To protect others:

- at the first sign of a cold, such as a tickle in your nose, flu or flu-like symptoms (fever, aches, headache fatigue, sore throat, cough).

See user comments;

- at the first sign of a fever and cough*

To protect yourself:

- in a crowded place, especially during flu season;
- if you are immunosuppressed and have to visit a crowded doctor's office
- if traveling (plane, buses, train, cruise) ; (Fig 5)
- if close to someone who is sneezing or has a cold or the flu;
- if you are unable to wear the mask and believe you have been exposed, wear it even 2 to 3 hours post exposure; eg, while watching TV in the evening.

If Corona virus is suspected, take all recommended precautions. Stay Isolated. See a doctor.

Adults with heart and lung conditions that make breathing through ordinary masks difficult, and those with high blood pressure for whom certain cold medications are contraindicated (should not be used) may find the mask particularly helpful in the above conditions.

ALLERGIES:

Wear mask when you are being exposed to known environmental allergens, for example, outdoor activities, when cutting a lawn, yard work, or harvesting hay. (Fig 6) See user comments at www.kuhncoppersolutions.org.



Fig 6 Protect against environmental allergens

RED TIDE:

Red Tide is caused by a noxious algae, *K. brevis*, present in the coastal waters of Florida and beyond. When the surf pounds against the beach, the algae are broken apart and release a “symphony of toxins”. This causes coughing and respiratory distress. Red tide can be harmful to people, pets, fish, shellfish, marine mammals, and birds. Wear the copper mask to relieve symptoms. Note: If a wind is blowing, toxins may penetrate the mask. Wear the copper mask under a surgical mask.



Fig 7 The KCM is not for use under any condition in which blood or bodily fluids can splash directly on the mask.

<https://unsplash.com/s/photos/surgeon>

CONTRAINDICATIONS: Avoid use:

- **copper sensitivity or toxicity to copper or metal allergy of any kind. If you are uncertain regarding copper allergy or sensitivity, secure the small copper patch with hypoallergenic tape to a site under upper part of arm for 24 hours. Remove and inspect the site for redness or any irritation. If redness or irritation is present, immediately discontinue use. Return for a full refund.**
- **Wilson’s disease, a genetic disorder causing copper to accumulate in the body. People with fibromyalgia, a disorder causing chronic musculoskeletal pain, or related conditions such as chronic fatigue syndrome. Consult a doctor before use.**
- **children, infants, or in pregnant or breast-feeding women. No tests have been conducted in these populations. The body has a natural mechanism for maintaining copper levels; however, children under one have not developed this mechanism.**

WARNING: The KCMs are not intended as a surgical, infection control, dental, or medical procedure mask and should not be used under any conditions where bodily fluids or blood may be sprayed directly on the KCM as a splash may penetrate mask (Fig 7). Also, the KCM is not for use in high risk aerosol- generating conditions, nor for use in clinical situations where infection risk level through inhalation exposure is high. The KCMs or copper mesh Insert (KMI) may be worn beneath a traditional surgical mask, dental, isolation or surgical procedural mask to enhance protective properties; for example, health care workers, dentists, surgeons, or first responders. A KMI is designed to be worn beneath another mask and will provide extra protection and a comfortable wearing experience.

CAUTION: Wearing a KCM does not eliminate the possibility of contracting or spreading diseases. Corona can infect in 15 minutes or less. The use of the KCM is not a substitute for good hygienic practices, social distancing 6 feet away from next person, avoidance of warm humid crowded places, careful cleaning, proper

handwashing techniques, immunizations, antiviral drugs, or antibiotics. Regardless of precautions taken, corona virus, cold, flu, other viral infections, other infections, or allergy symptoms may develop,

If you experience persistent symptoms of a cold, flu, or chest or sinus infections, consult a doctor. If you experience persistent cough and a fever, consult a doctor.

RISKS: What are the possible risks or discomfort?

- An abrasion may result if the Copper KCM is fitted too tightly on the face or is too small for the wearer (replace ear loops with longer loops).
- Though copper allergy is extremely rare, if a person is allergic to the copper, he/she may experience discomfort, redness, red marks, irritation, rash, pain, swelling, and/or blisters. Discontinue use immediately. Return mask for full refund. (See Return policy, p.8.) Usually, medical treatment is not needed. However, if any of the above symptoms become worse or if the red marks/rashes are spreading, seek medical advice immediately.
http://www.ehow.com/about_5507189_symptoms-copper-allergy.html The risks can be lessened by carefully following the instructions.

SAFETY: Copper is needed to maintain health and occurs in foods. Absorbing trace amounts is safe. Allergy, sensitivity, and irritation to copper are rare. The miniscule amounts deposited in the nose, 1.6ppm in the highest sample after two hours of wear, was 3 orders of magnitude lower than the amount of copper dust that would need to be inhaled to cause an adverse effect, 994 pp. Copper detected on soaking (eluting) the entire mask in water at 37°C for 72 hours was only 2 ppm.

Copper has to be ingested as a chronic oral ingestion in food and water that supplies more than 5mg/kg per day to reach toxic levels and cause harm. ^(1, 2)

1. Aggett PJ Fairweather-Tait. Adaptations to high and low copper: its relevance to estimate safe and adequate daily dietary intake. S.Am J Clin Nutri 1998; 6:1061S-1063S
2. Copper and the Skin, Hostynek and Maibach ed, Informa healthcare, NY and London. P57. 73:2006.

POTENTIAL BENEFITS: The KCMs allow the user to breathe sanitized, filtered air.

CLEANING PROCEDURE: Before each use, visually inspect the KCM for tears, tarnish, or soiling. If the KCM becomes wet, dry and disinfect before reuse.

Tarnish removal: Copper will tarnish or discolor when exposed to water and air. Though tarnishing does not affect the virus inactivating properties, removing tarnish when it first appears is most effective. If visibly discolored, soak KCM in ½ cup vinegar and cover with about ½ cup lime juice or lemon juice concentrate for two to four (2-4) hours or until the tarnish disappears. Rinse well with water, then with rubbing alcohol and finally with water. Place the KCM between two sheets of absorbent paper toweling and press until no more water comes out. Dry thoroughly. (See Tarnish Removal Video) If the tarnish is in a small spot, wet a cotton swab with lemon or lime juice concentrate, and rub on the discolored spot until the spot disappears. Rinse with water and then alcohol, and dry thoroughly. Store as instructed in Storage instructions.

Organic material removal: If visibly soiled with organic material, ie, from a sneeze, rinse the KCM in hot water, and scrub both sides with a new toothbrush until clean. Rinse again in hot water, then rinse in rubbing alcohol. Dry thoroughly as above. If the KCM is still visibly soiled, repeat the procedure. If the KCM remains visibly soiled, corroded, pitted, or torn, the KCM should be discarded in regular trash and replaced.

Disinfection/Sterilization: Inspect and remove organic material (ie, from a sneeze) before disinfecting or sterilizing, Disinfection greatly reduces the number of germs, sterilization kills all germs. Though the KCM will self-

disinfect in within minutes, the KCM may be disinfected immediately by rinsing or dipping in rubbing alcohol. Do not soak. The KCM may be sterilized by ethylene oxide or steam autoclaving (high temp, steam, and pressure). Once sterilized, it may be worn by another person. Because of the cidal (killing) activity, the KCM is not a repository (home) for germs.

SHELF LIFE/EXPIRATION DATE: Two (2) years. Though the cidal (inactivating and killing) activity of copper is permanent, the KCM can corrode or become pitted on exposure to water and air. It can tear if folded sharply. If the KCM is compromised (eg, torn or pitted), or is soiled to the extent that it cannot be cleaned, the KCM should be discarded in regular trash and replaced. If the ear loops become too loose, tighten with a slip knot. (See video below, Adjust Ear Loops)

STORAGE INSTRUCTIONS: Store in a dry place at room temperature in a sealable clear plastic bag along with the blue desiccant. If the desiccant pack turns pink, reactivate it by microwaving it for about 1.5 minutes on LOW power. The plastic bag can be reused to store or carry the KCM. Avoid folding the mask. Tarnishing will occur along fold. IMPORTANT: Never put the KCM in a microwave. This is a Potential Fire Hazard.

CONTACT: For questions, comments, reporting adverse events, please contact Pkuhnphd@aol.com. Research studies and new information will be posted on the website, Kuhncoppersolutions.org.

MONEY BACK GUARANTEE: If you are not completely satisfied with your purchase, you may return it within four weeks of receipt for a full refund or replacement.

TROUBLE SHOOTING: If you experience an undesirable outcome or adverse event, please contact Kuhn Copper Solutions Pkuhnphd@aol.com

Problem	Possible Cause and Corrective Action

<p>After you apply the Copper KCM, you smell a metallic odor.</p>	<p>This is to be expected. No action is necessary. It indicates the mask is “working” and releasing copper atoms. The odor will dissipate after about 20 minutes.</p>
<p>After you apply the Copper KCM you experience burning, redness, swelling, irritation on the face.</p>	<p>Possible allergic reaction. Remove immediately and rinse face in copious amounts of cold water. vvlf condition worsens, seek medical help immediately. Note: copper allergies rare.</p> <p>Do not reapply. Contact company to report adverse reaction and for full refund.</p>
<p>After you apply the Copper KCM, you experience a slight scratching in your throat.</p>	<p>A.Possible mild irritation or drying from the Copper KCM resolving within 10 to 15 minutes. No action is required.</p> <p>B.Possible irritation from Copper KCM not resolving within 10 to 15 minutes. Remove mask. Do not reapply. Contact company to report an adverse reaction and for a full refund.</p> <p>If condition worsens, seek medical help immediately. Note: copper allergies are extremely rare.</p>
<p>After you apply the Copper KCM, you are still experiencing a stuffy nose when exposed to environmental allergens; eg,</p>	<p>Possible inaccurate application. Look in a mirror. If the mask has slipped too low on the nose, a large gap will appear under the mouth. Readjust the Copper</p>

<p>mowing a lawn or harvesting , etc.</p>	<p>KCM so the top edge hits the upper part of the bridge of the nose and the bottom is resting under the mouth on the chin. Pinch the sides tighter until edges of Copper KCM are flush with face. The mask should fit snugly to the face . (See video,Applying the mask.)</p> <p>Possible sensitivity to small pollens less than 140 microns in diameter. Avoid activity that triggers the reaction. Wear a surgical face mask over the copper mask.</p>
<p>After you apply the Copper KCM, you experience some abrasions.</p>	<p>Possible frayed thin copper wire. Press the edges of the mesh on a solid surface. Put the mask on to see if this relieves the pinch. If this does not, replace the mole skin and ensure the mole skin covers all edges of the mask.</p>
<p>You are feeling a pinching sensation where the mask touches the skin</p>	<p>Possibly catching beard in the mesh. Shave before application. Alternatively, wear a copper mesh insert under a copper mask.</p>

Return Policy: Money back guarantee. If you are not completely satisfied with your purchase, you may return it within four weeks for a full refund. If the material rips within one month of purchase, the Copper KCM will be replaced. It must be returned in the original package and with all the original material, as well as the receipt.

This is a device for sanitizing and filtering the air.

If you have questions, contact:

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Made in U.S.A.