

Existing Solutions:

Fixatives:

- Fixatives provide a protective layer over pastels similar to a finishing glaze. While it helps the dust not rub off, it often ruins the quality of the artwork and can stain the paper. This also does not eliminate the particles already in the air and can only be applied after.

Masks:

- Masks help prevent against the inhalation of pastel dust but can provide a false sense of security. For those with certain heart and lung diseases, breathing through a respirator or mask might prove difficult. There is also the issue of sizes and breathing stress.

Highly Toxic Pigments:

- Antimony White (antimony trioxide)
- Barium yellow (barium chromate)
- Burnt or raw umber (iron oxides, manganese, silicates or dioxide)
- Cadmium red, orange, yellow, or barium colors (cadmium sulfide, cadmium selenide)
- Chrome green, orange, or yellow (lead chromate)
- Cobalt violet and yellow (lead Chromate)

These heavy metals can cause lung cancer, skin cancer, nerve damage, kidney damage, and anemia.



Pastel Dust

When pressed on a canvas, paper, or other surfaces, pastels create dust and smaller pieces that can have harmful long term effects and cause a mess.

Breathing in the dust created by the use of pastel sticks has been found to have harmful effects on the respiratory system (contains small enough particles to enter the alveoli, the lung air sacs), and they may contain materials that are suspected carcinogens (complex hydrocarbons such as benzidines and anthraquinones).



Additional Facts:

- Inorganic and organic pigments can be toxic and aren't always listed on labels
- The dust is also very messy and spreads quickly, consisting of extremely fine particles which make it easier to inhale
- This issue affects artists who use pastels in their work as well as students and others who use this medium for experimentation.
- This problem has been around since the beginning of this medium's use (though unaware to the public for some time) for about 250 years



This problem should be solved so people can create freely without having to worry about their health or the messiness of their room.

PERSONAL INFORMATION

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