



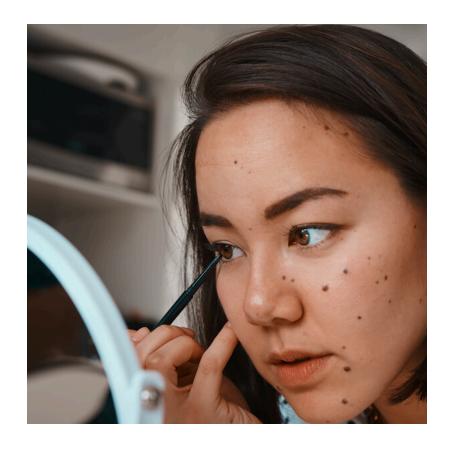
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# Carbon Black

Carbon black is a dark black powder used as a pigment in cosmetics such as eyeliner, mascara and lipstick. [1] It is produced by incomplete combustion of carbon-based products such as coal tar, [2] and has been linked to increased incidence of cancer and negative effects on organs. [3]



### WHAT IS CARBON BLACK?

Carbon black is the product of incomplete combustion of carbon-containing materials.  $[\underline{6}]$ 

Commercial carbon black, in particular, has organic contaminants such as polycyclic aromatic hydrocarbons (PAHs), which have been identified as human carcinogens. PAHs damage DNA, and exposure to PAHs can lead to tumors on lungs, bladder and skin; and PAHs can also cause non-cancer toxicities like reproductive and developmental toxicity. PAHs bind tightly to the surface of carbon black and can only be removed with the use of solvents such as toluene at high temperatures. People can be exposed to carbon black through inhalation, skin or eye contact, and food and beverages. [11]

## Found In

- Eyeliner
- Mascara
- Nail polish
- Eye shadow
- Brush-on-brow
- Lipstick
- Blushers
- Rouge
- Makeup
- Foundation

## What to look for on the label

- Carbon black
- D & C Black No. 2
- Acetylene black
- Channel black
- Furnace black
- Lamp black
- Thermal black

### **Health Concerns**

Cancer: California EPA's Proposition 65 list identifies carbon black (airborne, unbound particles of respirable size) as a carcinogen. The International Agency for research on cancer classifies carbon black as a possible human carcinogen. Experimental studies in female rats found increased incidence of lung tumors in rats that inhaled carbon black. NIOSH raises concerns about lymphatic cancer among workers exposed to carbon black, largely due to the presence of polycyclic aromatic hydrocarbons (PAHs) in carbon black. Furthermore, carbon black containing PAHs may lead to skin cancer. Long-term exposure to carbon black can lead pulmonary inflammation, fibrosis and lung tumors in rats.

**Organ System Toxicity:** Several human studies indicate carbon black exposure may increase the risk of lung disease. [19] Carbon black exposure is a possible concern for workers, particularly exposures to the respiratory system and eyes when it is in powder form. [20] Early research suggests carbon black may increase the incidence of cardiovascular disease. [21]

# **Vulnerable Populations**

<u>Teenagers (https://www.safecosmetics.org/population/teenagers/)</u>, <u>Workers (https://www.safecosmetics.org/population/workers/)</u>

# Regulations

Restricted in cosmetics in United States [4] and EU. [5]

## How to Avoid?

Read labels and avoid cosmetics and personal care products containing carbon black, D & C Black No. 2, acetylene black, channel black, furnace black, lamp black, and thermal black.

## **Explore other Chemicals**

<u>Styrene Acrylates Copolymer (https://www.safecosmetics.org/chemicals/styrene-acrylates-copolymer/)</u>

Butylated Compounds (https://www.safecosmetics.org/chemicals/butylated-compounds/)

<u>Acrylates (https://www.safecosmetics.org/chemicals/acrylates/)</u>

Mica (https://www.safecosmetics.org/chemicals/mica/)

Polyacrylamide (https://www.safecosmetics.org/chemicals/polyacrylamide/)

<u>Fragrance (https://www.safecosmetics.org/chemicals/fragrance/)</u>

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### Looking for a Safer Alternative?

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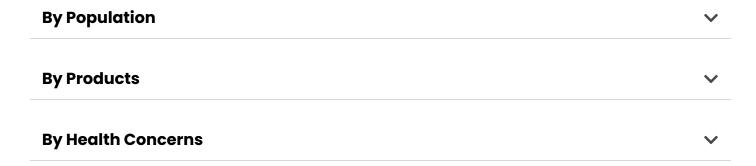
# **Your Action Helps**

Together, we can make beauty safer for all.

Take Action Today!

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