



# Toxic 3 Os Used in Sunscreen

## Why in News

Recently, a petition has been submitted by some activists to the **US Food and Drug Administration (FDA)** to reclassify **toxic 3 Os (Oxybenzone, Octinoxate and Octocrylene)** used in sunscreen.

- They demanded that chemicals be shifted to **“Not Generally Recognized As Safe & Effective” (GRASE Category II)**.

## Key Points

### ▪ Toxic 3 Os:

- Oxybenzone (OBZ), avobenzene (AVB), octocrylene (OCR) and octinoxate (OMC) are **UltraViolet (UV) filters** commonly added to chemical sunscreens.
- These UV filters are known to widely contaminate the environment through a variety of **anthropogenic sources**, including sewage discharge.

### ▪ Related Concerns:

- **The 3Os** are active ingredients present in more than **two-thirds of all sunscreens** and they pose a **threat to public health, marine life and coral reefs**.
- **Octocrylene** in sun protection products **degrades into benzophenone**.
  - Benzophenone is a carcinogen that can also interfere with key hormones and reproductive organs.
- They cause **human cell damage** that has been linked to cancer, disrupt hormones, have been found in breast milk, blood and urine and are **known allergens**.
- Oxybenzone is **particularly toxic to corals** at concentrations as low as a few parts per trillion.
  - They wash off people’s bodies when they swim and contaminate through waste water runoff and cause **‘zombie’ coral** which looks healthy but is unable to reproduce, **coral bleaching** as well as other issues.



## say **YES** to minerals

Natural minerals reflect UV to protect from burning and aging rays. They rub in sheer and are immediately effective. Because minerals aren't absorbed, they are safe and gentle on sensitive skin, and just as gentle on the planet!

## say **NO** to chemicals

Chemical sunscreens disperse UV rays through the body and need 20 minutes to become effective. They're absorbed into the skin and the bloodstream, where they've been linked to health issues from allergies to infertility. They've even been tied to the destruction of the coral reefs.

[Source: DTE](#)

PDF Reference URL: <https://www.drishtias.com/printpdf/toxic-3-os-used-in-sunscreen>