

PRESS RELEASE

Exposing the Hidden Danger: High Levels of Toxic Chemicals Detected in Everyday Receipts

A new study detected alarming levels of hormone-disrupting bisphenols in thermal papers

[30 May 2024, New Delhi]: The study titled "BPA in Thermal Paper: A Monitoring Study" reveals the presence of high concentration of Bisphenol-A (BPA) in thermal papers that are widely used in many applications, such as labels, tickets, medical charts, points of sale (POS) such as restaurants, kiosk, hotels, gas stations, supermarkets, and for labels, gaming, ticket & tags, etc. Notably, there is a voluntary restriction on BPA use in thermal paper by the Bureau of Indian Standards, considering its health concerns.

Toxics Link, a Delhi-based environmental research and advocacy organization, in their recent study had collected twenty samples of thermal paper from a variety of sources in Delhi including food eateries, metro stations, ATMs, grocery stores, and suppliers on e-commerce platforms. The samples were tested for BPA & BPS and the test results detected bisphenol analogs in all the samples in range from 3.63 ppm (or mg/kg) to 17400 ppm (or mg/kg). The highest concentration of BPA was reported in samples collected from food eateries.

Since 2014, Toxics Link has been raising concerns about BPA and released a report on BPA use in thermal paper in 2018. The study found very high concentrations of BPA up to 6600 PPM. Later, in 2021, the **BIS released the voluntary standard IS 17568:2021 for BPA in thermal paper that clearly mentions "free from BPA".** Despite the standards, the recent study shows higher concentrations of BPA in comparison to previous findings.

BPA, a known endocrine-disrupting chemical, is a synthetic phenolic compound that has the ability to disrupt the hormone system. It can prevent the binding of natural hormones to their receptors and/ or mimic hormones such as estrogen and androgen hormones hence causing damages to reproductive system. BPA can also affect the immune system and neuroendocrine system in humans. As BPA is not chemically bound to thermal paper, it can easily adsorb through the paper to the skin and can also release into the environment. Therefore, BPA has been banned/restricted in various products globally, including thermal paper.



The study also revealed that Bisphenol-S (BPS) is used as an alternative to BPA which itself is a well-known toxic chemical and globally discussions are going on to regulate its usages.

"Availability of BPA laden highly toxic and non-compliant thermal paper in shops and on online portals is in disagreement with the national standards Considering the serious health and environmental concerns from BPA, there is a need for a stricter monitoring and a mandatory standard for BPA in products as a preventive measure to protect human health," said **Piyush Mohapatra, Senior Programme Coordinator, Toxics Link.**

Study Findings

- A total of twenty samples were collected from Delhi and were analyzed for BPA and BPS from a well-known NABL-accredited lab
- Samples were collected from food eateries, bank ATMs, Delhi metros, grocery shops, and products available on online e-commerce platforms.
- In all the tested samples, at least one of the Bisphenol analogs (BPA or BPS) was detected.
- BPA was reported in thirteen out of twenty samples in concentrations ranging between 3.63 to 17400 ppm.
- BPS was reported in twelve out of twenty samples in concentrations ranging between 52.8 to 9300 ppm.
- Both BPA & BPS were reported higher in samples collected from eateries in comparison to other sectors.

About us:

Toxics Link is a Delhi-based environmental research and advocacy organization set up in 1996, engaged in disseminating information to help strengthen the campaign against toxic pollution, provide cleaner alternatives and bring together groups and people affected by this problem. Toxics Link has unique expertise in areas of hazardous, medical and municipal wastes, international waste trade, and the emerging issues of pesticides, Persistent Organic Pollutants (POPs), hazardous heavy metal contamination etc. from the environment and public health point of view. We have successfully implemented various best practices and have brought in policy changes in the aforementioned areas apart from creating awareness among several stakeholder groups.

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