Lead, Chromium VI, Azo Dyes and Other Restricted Chemicals in Imported Goods

SourcingFrom

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Which restricted chemicals actually fail in Indian-made goods sold in the EU, UK and US, based on 211 official alerts and recalls from 2021 to September 2026. It maps each risk to a material and shows how to write a one-page restricted substances list.

The Short Version

- Chemical failures cluster in leather, cheap metal alloys, PVC and prints, cosmetics and toy rubber.
- Chromium VI in Indian leather measured 5.0 to 20.5 mg/kg against a 3 mg/kg EU limit, so test each colour and hide lot.
- Cadmium in jewellery is the alloy itself, so specify the alloy for every metal part, screws included.
- 32 of 62 EU cosmetics alerts on Indian products were one banned fragrance, BMHCA (lilial).
- Azo dyes were rare: one EU alert in five years, on bamboo placemats.

In July 2026 Primark pulled pepper mills from its UK stores because they had too much lead in them (OPSS, July 2026). The same year, an EU Safety Gate alert on an Indian-made pepper mill named the exact part that failed on lead, and it wasn't the body or the finish but the top screw (Safety Gate, 2026). One small brass fitting, picked because it machines easily, in a product nobody thinks of as risky.



That's what a restricted-substance failure usually looks like in our data.

We read 211 official alerts and recalls on Indian-made non-food goods from January 2021 to September 2026, 130 from EU Safety Gate, 36 from the UK and 45 from the US. The chemistry failures land in five places - leather, jewellery and metal parts, prints and plastics, cosmetics, and toy rubber. In almost every case the chemical came in through a material choice somebody made, which means you can control it with a written spec before production instead of hoping a final test catches it. India is our worked example, but the method works for any origin. One caveat - alerts show what authorities chose to test, not how often goods actually fail.

1. Start With the Material, Not the Product

Most buyers ask "what tests does a wallet need?" We'd ask what the wallet is made of. Chemicals live in materials, and the same material carries the same

risk whatever it ends up as. Here's the map from our records –

Material	What failed	Records	Where it shows up
Chrome-tanned leather	Chromium VI	12 EU	Wallets, shoes, sandals, slippers, work gloves, baby shoes, a dog lead, children's lederhosen
Cheap metal alloys	Cadmium, lead, nickel release	11 EU, 10 UK, 2 US	Earrings, bracelets, rings, pendants, candle holders, pepper mills
PVC, plastisol prints, stickers	Phthalates (DEHP, DIBP, DBP)	5 EU, 4 UK, 2 US	Wallets, shoes, T-shirt prints, face stickers, cricket sets, hockey sticks
Fragrance and cosmetic formulations	Banned BMHCA (lilial), PPD in hair dye, steroids, zinc pyrithione	62 EU, 7 UK	Perfumes, attars, body sprays, hair oils, hair dyes, creams, shampoo
Rubber and foam in toys	N-nitrosamines and nitrosatable substances	6 EU	Toy tyres, foam toys
Dyed natural materials	Azo dyes releasing banned amines	1 EU	Bamboo placemats
Stone fill	Asbestos in marble chips	2 UK	Doorstops and draught excluders



Sources: EU Safety Gate, UK OPSS, CPSC, our counts, 2021 to September 2026.

If you write your restricted substances list (the "RSL" brands send to suppliers) from this table, material by material, then you've covered the risks that have actually hit Indian goods. Asbestos in a doorstop, by the way, is not something any buyer sees coming.

2. Chromium VI in Leather

Chrome tanning is how most of the world's leather is made, India's included, and there's nothing wrong with it. The problem is chromium VI, a form that can show up when the tanning chemistry isn't controlled, and the EU bans it in leather that touches skin at 3 mg/kg or more (Regulation (EU) No 301/2014). The eleven Indian leather items caught in the EU measured 5.0 to 20.5 mg/kg. That is well over the line.

Two details in the alerts change how you should test. The items range from protective work gloves (20.5 mg/kg) to a German child's lederhosen (7.1) and baby shoes (12.7), so the common thread is the tannery rather than any one product line. And chromium VI can form after tanning, in storage and heat, which means a sample that passed in March doesn't vouch for the stock you get in August.

So test each colour and each hide lot, and ask the maker which tannery supplied the leather. Our leather industry page and the Kanpur leather cluster page explain how tanneries and goods makers split the work.

3. Cadmium, Lead and Nickel in Metal Parts

This is the clearest case of a chemical that was chosen rather than picked up by accident. EU alerts on Indian jewellery measured cadmium at 80% and 95% of an earring's weight, 59% of a bracelet, 58% of a jewellery set and 48% of a ring (Safety Gate, our reading). Nobody contaminates a ring to 48%. Cadmium alloys are cheap, melt low and cast well, so somebody picked them, and a Finnish authority found lead at 83% of the weight of parts of a pair of earrings.



The EU limits your lab will test against look tiny next to those numbers. Cadmium in metal parts of jewellery is capped at 0.01% by weight, lead in parts that can be mouthed at 0.05%, and nickel release from skin-contact items at 0.5 µg/cm² per week. Those are REACH Annex XVII limits we couldn't re-read at source this time, so confirm the current figures with your lab. In the US, lead in children's products is limited to 100 ppm and lead in paint to 0.009% (CPSC).

The control is your purchase order. Specify the alloy for every metal part in writing, findings, clasps and screws included, then have every metal part screened by XRF at pre-shipment and send anything flagged to a wet-chemistry lab.

And remember the pepper mill. Home décor and kitchenware buyers don't think of themselves as jewellery buyers, but a brass candle holder (lead at 0.9%, Sweden, 2025) or a mill screw fails on exactly the same rule. Our brassware page covers metal home goods from Moradabad.

4. Phthalates in Plastics and Prints

Phthalates are what make PVC soft, so they turn up wherever something is plastic and bendy. In Indian goods we found them in a wallet (DEHP at 22% of the plastic), shoes (DEHP 6.58%, DIBP 2.22%), a child's T-shirt print (DEHP 0.14%), sticker sets and fancy-dress accessories (Safety Gate, our reading). The UK stopped an Indian children's cricket set at the border and destroyed it, and England Hockey's wooden Quicksticks were pulled too, both over phthalates (OPSS).

What's the limit? In the EU it's commonly 0.1% by weight for the listed phthalates in articles (Reported, confirm with your lab). The US restricts eight phthalates above 0.1% in accessible plasticised parts of children's toys and childcare articles (16 CFR 1307).

The fix is a phthalate-free spec for every plastic part and print ink, backed by a declaration from whoever supplies the ink or compound, and then a test on production. A sports-goods maker in Jalandhar or Meerut can source compliant grips and coatings easily, and the only thing usually missing is that nobody asked.



5. One Banned Fragrance Behind Half the Cosmetics Alerts

Cosmetics make up 62 of India's 130 EU non-food alerts, and 32 of those come down to one ingredient, BMHCA, also called lilial (Safety Gate, our count). It was a common fragrance material until the EU banned it in cosmetics, and it still turns up in perfumes, attars, body sprays, hair oils and soaps made for other markets. The UK has its own run of cases, including a well-known almond hair oil and an anti-dandruff shampoo in 2025 and 2026 (OPSS).

It's easy to see how it happens. A fragrance house supplying the domestic market has no reason to drop an ingredient India still permits, and an export batch can pick up the old compound on the way.

So if you sell into the EU or UK then ask the perfume house for a fragrance allergen and banned-substance declaration for each batch, not once per

product. Hair dyes are the other big group, with 14 EU alerts for PPD without its coupling agent, at up to 10.9% by weight. Skin-lightening creams with clobetasol or hydroquinone, plus a cosmetic powder that was 85% lead, make up most of the rest. Our cosmetics industry page and the Kannauj attar cluster page go deeper.

6. Azo Dyes in Textiles Are a Smaller Risk Than You'd Think

We expected azo dyes everywhere and found almost none. One EU alert in five years named azo dyes on an Indian product, and it wasn't even a garment but bamboo placemats, with dyes releasing benzidine at 150 mg/kg and 3,3'-dimethoxybenzidine at 360 mg/kg against a limit of 30 mg/kg per amine (Regulation (EC) No 552/2009). Indian export textile houses test for azo as routine for their brand customers, and it shows in the numbers.

The risk sits with dyed natural materials and small craft makers who don't sell to big brands, so that's where your testing money should go.

7. The US Is Different Again

Outside children's goods, the US caught very little Indian chemistry. Two lead-in-paint recalls (a wooden stacking toy and a croquet set) and a phthalate recall on a baby book are the whole chemical side of the 45 CPSC recalls (CPSC, our reading). Most US recalls are about fire, electrical faults and child-resistant packaging.

California is the odd one out. Proposition 65 adds a warning duty for many listed chemicals, lead and some phthalates among them, and it's enforced through private notices rather than a public alert list, so you won't see the

cases coming. If you sell into California then ask your lab to screen against Prop 65 for your product and take advice on the warning.

SourcingFrom Intelligence

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01 **Chromium VI in Indian leather isn't borderline.** The 11 EU leather measurements ran from 5.0 to 20.5 mg/kg against a 3 mg/kg limit. Test per colour and hide lot. *(EU Safety Gate, our count, 2021 to Sep 2026, and Regulation (EU) No 301/2014.)*

02 **Cadmium in jewellery is the alloy itself.** Six EU alerts measured 38% to 95% cadmium by weight. Put the alloy in the PO. *(EU Safety Gate, our count.)*

03 **One banned fragrance is half the cosmetics problem.** 32 of 62 EU cosmetics alerts on Indian products are BMHCA (lilial). Ask for a declaration per batch. *(EU Safety Gate, our count.)*

04 **Small metal parts fail on lead.** A pepper mill's top screw, a brass candle holder at 0.9% lead. Spec every metal part, not just the visible ones. *(EU Safety Gate, OPSS.)*

What we don't know yet

- ☐ Failure rates. No authority divides alerts by volume shipped.
- ☐ Australia and New Zealand. Their recall lists carry no origin, so we have no Indian count.

8. How to Build Your Own Restricted Substances List

Your restricted substances list doesn't have to be a 60–page brand manual. For a small importer, one page does the job -

1. List every material in the product, down to the screws, inks, glues and labels.

2. Next to each material, write the substances from the table above and your market's limit. Your test lab will give you the current limits.
3. Send it to the maker before the sample, and ask for declarations from their material suppliers.
4. Test production pieces at an accredited lab, by material and lot, and keep the reports with the lot number.
5. Repeat whenever a material supplier changes, because that's when most problems arrive.

Step 4 is the hard one. It needs a person in India pulling the right pieces from the right lot and sending them to the right lab, and if you don't have that person then SourcingSync can arrange sampling and inspection at origin.

9. Back to the Pepper Mill

A big retailer, a simple product and a recall over one screw. Was the Indian maker sloppy? We don't think so, because nobody had written down what the screw should be made of. Give every material in your product a line on your list, and the small ones most of all.

10. Next Steps

- Children's goods, where design faults matter more than chemistry: children's product safety.
- Testing and inspection in India: quality control in India.
- Product pages: leather bags, leather footwear, brassware, essential oils.
- Market rules: EU, UK, US.
- Related: textile certifications, sample perfect, bulk not and HS codes.