

## **CSE Press Release... this week**

### **Lab study finds paints in India have unacceptable levels of toxic lead**

**Questions use of other chemicals in our common household products,  
as government does not set any standards**

- **CSE laboratory tests twice – in 2008 and 2009 – to check for toxic lead content in household paints. Finds Indian paints contain high and unacceptable amounts of lead – breaching the voluntary standard set by the Bureau of Indian Standards**
- **72 per cent of the samples contained lead levels much higher than the BIS limit. Shalimar Paints' Superlac brand had the highest amount**
- **Lead in paints has been indicted for being a silent epidemic – exposure can even lower IQ in children, say scientific studies**
- **CSE study says weak regulatory control the real culprit. India has only a voluntary standard for lead in paint, which companies don't meet**
- **Paint is an example of the many other household products – from detergents to cleaners – we use, but which can be toxic**

**New Delhi, August 17, 2009:** The paints used in Indian homes come with a deadly health cost. Most of the popular brands of paints contain high quantities of lead, a toxin especially dangerous for children -- says a latest study done by Centre for Science and Environment (CSE).

Over 2008 and 2009, CSE's Pollution Monitoring Laboratory tested these brands for their lead content. It found 72 per cent of the samples had lead much higher than the voluntary limit specified by the Bureau of Indian Standards (BIS). There is no mandatory standard for lead levels in paints in the country.

Says Sunita Narain, director, CSE: "Every moment, we are building a stock of unwanted, toxic chemicals in our bodies. Lead from our house paints is one of them. It's deadly because it can lower children's IQ."

CSE's lab has a series of ground-breaking pollution studies to its credit. In 2001, it had tested endosulphan residues from environment and human samples in Kasaragod district in Kerala. In 2003 and 2006, pesticide residue tests were carried out on bottled water and soft drinks, while blood samples of farmers in Punjab were tested for pesticides residues in 2005. The lab's most recent study was on transfat levels in cooking oils, done in February 2009.

### **What the study found**

In 2008, CSE's laboratory had procured 25 samples of popular enamel paints randomly from Delhi markets and analysed them for lead content. The brands tested were Apcolite (Asian Paints), Nerolac (Kansai Nerolac Paints), Luxol (Berger Paints India), Superlac (Shalimar Paints) and Dulux (ICI India). The study covered five of the six major companies in the organised sector, which control 75 per cent of the household paints market.

The results were startling.

- Lead was found in 23 of the 25 samples tested. Seventy-two per cent of the samples – 18 samples -- contained lead much higher than the 1,000 ppm limit specified by the BIS.
- The highest lead content was in the deep orange paint of the Shalimar's Superlac brand – 185 times the BIS limit and 308 times the US paints limit of 600 ppm.
- Berger brand Luxol's golden yellow color had a staggering 162,559 ppm lead – 163 times the BIS limit and 271 times the US paints limit.
- All the samples of ICI-Dulux had lead much below the specified limit. In fact, of the five paints manufacturers, only ICI did not use lead in its paint formulations. The white shades of Asian Paints and Nerolac also conformed to the standards.

Based on this study, when CSE wrote asking companies for their plans to remove lead from paints, Asian Paints and Nerolac responded saying they were in the process of change. In 2009, CSE tested to confirm what had been done – taking samples from each of the five major companies.

This study showed improvement in the sample of Asian Paints and Nerolac, but samples of Berger and Shalimar still had high and unacceptable levels of lead in paint. Clearly, therefore, while getting rid of this toxin from our common household product is possible, it is not being done on a voluntary basis, without mandatory regulations.

### **Lead is harmful**

Doctors refer to lead as the 'silent epidemic'. The human body cannot process and excrete lead. Sustained and large exposure can cause serious damage. Children are especially susceptible. Lead can damage their still developing central nervous systems and brains, leading to a child performing poorly in exams or having short attention spans. Adults exposed to lead poisoning may find it difficult to concentrate or remember things, and feel pain in muscles and joints.

Even extremely low levels of lead can impair foetal development.

It is easy to get exposed to lead. One can pick it up by touching paint on walls and other surfaces, inhaling exhaust fumes from a vehicle, or while walking on leaded paint chips, says the CSE study.

The US Agency for Toxic Substance and Disease Registry has declared lead level in blood exceeding 10 microgramme per decilitre as unsafe -- studies indicate that over 60 per cent of children in India may have more than this level in their blood. And paints are a key source.

The CSE study refers to research done by the Mangalore based-Kasturba Medical College, published in the *Indian Journal of Pediatrics* in 2004, which had found 11 children – out of 104 – with over 40 microgramme per decilitre of lead in their blood. One, who had a blood lead level of almost 73 microgramme per decilitre, regularly played on a swing coated with lead-based paint. The child's lead level dropped to 46 microgramme per decilitre when the swing was repainted with a lead-free product. It is for this reason that governments across the world have set mandatory standards for lead in paints – the most common exposure for households.

### **We have 'voluntary' and lax regulations**

Like most chemicals, paints in India can be made, sold and used without any regulatory controls. The BIS specifications for the paints sector are voluntary, setting the limit at 1,000 ppm. The US, Canada and Singapore have limited the lead content in their paints to 600 ppm. The European Union had, as far back as 1988, banned lead in paints. Now it allows lead-based paints for restoration of art works and buildings. It stipulates harsh warning on any paint product, which has lead.

Says Chandra Bhushan, associate director, CSE: "This is when it is clear that companies have the capability and technology to phase out lead from their products. But as costs are an issue, companies complain that making lead-free paints makes the product expensive, and lowers their market share. It is therefore, even more important to have mandatory standards for all branded paint companies."

### **It is not just paints we need to worry about**

"Our households are at risk because we do not know what chemicals are in the products that we use," points out Narain, explaining that more and more products containing toxic chemicals are in the market. For instance, detergents and cleaners have chemicals which could be toxic and banned in different countries.

Says Bhushan: "In India, we only have environmental regulations on the production – effluent standards – but not on the products that we use. The scheme for eco-labelling of detergents, started in the early 1990s, also voluntary, has completely failed, with not one product labelling ingredients or complying with its specifications. We urgently need environmental product standards in the country before our health is even more at risk because of chemicals in our households."

### **Resources**

- For the full laboratory study, pls visit [http://cseindia.org/lead\\_paints.pdf](http://cseindia.org/lead_paints.pdf)
- For more details, or to speak with a toxins expert at CSE, please contact Shachi Chaturvedi at [shachi@cseindia.org](mailto:shachi@cseindia.org) or on 98187 50007.