LEAD IN PAINTS

- Lead is one of the 300-odd ingredients used to make paints; used as pigment to impart color.
- It makes the paint durable and corrosion resistant, and speeds drying of the paint.
- Lead chromate (or chrome yellow) and lead carbonate (or white lead) are widely used as pigment.

LEAD IN PAINTS: WHY CSE TESTED

- Lead causes serious damage to health
- Lead damages the central nervous system and the brain; impairs growth, damages the kidney, lowers sperm count
- Children are most susceptible to lead poisoning; can cause anemia, jaundice and hearing loss

LEAD IN PAINTS: THE STUDY

PHASE I:

CSE tested 25 samples of popular enamel paints for lead content.

- The brands were Apcolite (Asian Paints), Nerolac (Kansai Nerolac Paints), Luxol (Berger Paints India), Superlac (Shalimar Paints) and Dulux (ICI India). The colours were yellow, orange, green, black and white.
- **The lead concentration varied from zero to 184,733 ppm, the highest amount being present in the deep orange paint of Superlac brand.**
- Of the brands tested Dulux paints had lead below the 1000 ppm limit

LEAD IN PAINTS: THE CSE STUDY

Phase I:

- 72 per cent of the samples contained lead much higher than the BIS standard of 1000 ppm
- CSE wrote to companies asking for information about lead in paints. Response from companies that they were working to reduce lead in paints. Gave deadline

LEAD IN PAINTS: THE CSE STUDY

- **Phase II:**

CSE decided to test the paints again -- 8 samples were tested

- Asian Paints lead content in deep orange and black dropped to **29.24 and 28.71 ppm lead, from the earlier 59,149 ppm and 17,720 ppm respectively**

- **Nerolac too had reduced the lead levels in yellow and orange**

- Berger and Shalimar exceeded their earlier lead content

LEAD IN PAINTS: STANDARDS

- The BIS has voluntary standards for 1000 ppm of lead in paints
- **After studies on lead in paints- BIS drafted rules to scale down the lead limit for decorative paints to 90 ppm (90 mg/kg)** (best global practice)
- **BIS rules are yet to be notified**
- DIPP formed a committee to make rules but not much has happened there

Phthalates in toys: 2008

- Phthalates are used as plasticisers – substances added to plastics to increase flexibility
- Some have severe health impacts. Need to be controlled and not allowed in children's toys

- CSE tested 24 samples of major brands

We found:

- 46% samples had phthalates exceeding EU limit of 0.1 per cent by mass of plasticised material
- Many toys, which had phythalates – DINP, DEHP – were those used as teethers or toys that children would put in their mouth (like squeaky toys made by Funschool India)
- The majority of toys were made in China – has 70 per cent of the toy market of India, does not regulate phthalates

What has happened

- BIS standards did not include phthalates
- CSE study led government to consider options
- In April 20, 2011, BIS released draft regulations on standards on phthalates in toys
- The draft says that DEHP, DBP and BBP will be regulated to be less than or equal to 0.1% in all plastic toys and childcare products..
- Global best standard

Standard: awaiting

- Standard still draft
- Awaiting finalization: industry pressure to hold up draft
- But standard will be voluntary. Most manufacturers do no register for the ISI mark or follow voluntary standard
- Ministry of Commerce has to issue notification making phthalate standard mandatory
- Meanwhile. Children are at risk.

Hidden dangers: new evidence

- Chemicals and toxins – OC pesticides, phthalate, small particulates, etc are now classified as obesogens
- They make fat people fatter
- Fat cells store energy and release it when needed; fat cells are also endocrine organs – releasing hormones related to appetite and metabolism
- Now understood obesogens affect this mechanism; make people fatter, stop us from getting thinner

Chemical trespass

- Need to understand role of modern toxins in our homes, our bodies
- No regulation on chemicals being produced
- No registration, no process standard
- But chemical trespass into our bodies must be stopped
- One generation to another generation: chemicals become more toxic – comparative risk analysis needs to be basis of regulation
- Need studies, need regulations