CITY ANCHOR A SEMINAR ON PET PACKAGING WAS HELD AT NATIONAL CHEMICAL LABORATORY, PUNE

No reason to ban PET packaging, revoke notification: scientists to ministry

EXPRESS NEWS SERVICE

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SPEAKING at the seminar 'Know your PET packaging — Separate the myths from the facts' at CSIR National Chemical Laboratory, scientists said the Ministry of Health and Family Welfare (MHFW) should reconsider the notification proposing a ban on Poly-Ethylene Terephthalate (PET) packaging for pharmaceutical products. According to the scientists, the proposed move is not based on any existing practice or known science and hence, unjustified.

Speaking on the occasion, Swaminathan Sivaram, former director, CSIR-NCL, said packaging food and medicines in PET containers was completely safe. "There is a misconception about leaching of phthalates and migration of the heavy metals in the context of PET containers. This is incorrect. The chemistry of PET is such that the manufacture of the PET resin and its further processing into bottles does not involve the use of phthalates, which belong to the class of chemicals called plasticisers," he said. There was unnecessary confusion over the word 'phthalates' in case of PET, he added. PET does not contain endocrine disruptors like dioctylphthalates, amines or any epoxy compounds.

Prakash P Wadgaonkar, chief scientist, polymer science and engineering division, CSIR-NCL, said that no two plastics were the same, and each plastic had a different chemistry. PET is made from safe constituents such as PTA, IPA and MEG. PET polymer does not contain Bisphenol-A or low molecular weight phthalates, which are more widely known for their use as plasticisers in PVC. Moreover, the structure of PET resin is such that the antimony, a catalyst, used in extremely small amounts, cannot easily leach out of the strong polymer molecules in which it remains entrapped. Hence, PET containers are safe vehicles to package food and medicines.

THERE are strict specifications for PET packaging of food and pharmaceuticals. Also, pharmaceutical companies are mandated to conduct 'stability tests' as per the WHO-created ICH guidelines

Talking on the manufacturing process of the PET resin, Venugopal Premnath, senior principal scientist, CSIR-NCL, said there was no need for use of other heavy metals such as lead, cadmium or chromium in the manufacture or processing of PET containers. Also, colourants used in PET are US-FDA approved for food contact applications. These are safe for humans.

In fact, the Bureau of Indian Standards has set stringent specifications for PET packaging of pharmaceuticals and food, which have been followed for the past 28 years. Pharmaceutical companies are mandated to conduct 'stability tests' as per the WHO-created ICH (International Conference on Harmonisation) guidelines to ensure that the packaging material carrying medicines is safe. Pharmaceutical companies have already moved from glass to PET bottles, following the ICH guidelines.

Ashish K Lele, chief scientist and chair, Polymer Science and Engineering Division, CSIR-NCL, said that PET bottles were manufactured by a simple injection stretch blow moulding (ISBM) system, unlike the complex process for manufacture of glass. PET is much lighter than glass, hence, convenient to carry, especially for children and older patients.