

Safe Use of Enzymes by Laundry Detergent Manufacturers—Recommendations from Regulatory Reforms and Standards Committee of IHPCIA

Regulatory and Standards Committee of IHPCIA have come out with recommendations of Self-regulatory guidelines to handle the enzymes by Home Care Industry, especially by the manufacturers of laundry detergents. Here are the details:

Background:

In an attempt to develop sustainable and green technology, the home care industry today is focusing on concentration, safe use and simple products. Consumers however do not want to compromise on performance and value for money. Therefore, the industry is exploring use of enzymes as a suitable performance enhancer in its products. Enzymes are important constituents of modern detergent products. They are proteins which catalyse chemical reactions. They break down soils and stains and thus achieve improved washing performance.

However, we would like to draw your kind attention on below aspect of safety of handling of these enzymes, especially at the manufacturing / packing locations.

- Enzymes and especially the dust associated, can potentially cause respiratory diseases / allergies, asthma and other probable respiratory conditions in workers exposed to these ingredients. Such effects may be found when process or equipment controls are inadequate.
- Workers' health is getting compromised in absence of any guidance on safe handling of the enzymatic components.
- While there are efforts done to reduce dustiness, through granulation, changing products forms, effective equipment to reduce human exposure etc. they seem to be restricted to process and equipment controls.

Thus, there is a need to introduce guidance on recommended safe handling practices along with the process and equipment controls. This can be cascaded across the Industry as a measure to be taken in order to safeguard workers from the potential health hazard.

About AISE Guidelines:

Globally, the AISE (International Association of Soaps, Detergents and Maintenance products), which is based in Brussels, has been the voice of the Industry to EU regulators for over 65 years. AISE has developed a document which provides detailed guidance on procedures and equipment recommended to achieve safe handling of enzymes. The said document is intended for use by detergent manufacturing facilities and by third-party co-packers. The guidance document support both the enzyme manufacturers/importers as well as the detergent manufactures so that they can have adequate control over risks of enzymes.

A careful study of the guidelines shows that, even though it is a detailed guidelines it has basic requirements mentioned, which are necessary to ensure the safe use of enzymes in detergent factories.

The AISE guideline covers the following aspects in detail and are equally significant for the Indian detergent industry:

- Setting of Occupational exposure guidelines for enzymes within detergent Industry
- Management and Supervision
- Control of enzymes during handling and manufacture of detergents
- Performance assessment of equipment and behavior
- Routine Air monitoring program
- Health Surveillance
- Monitoring and performance assessment follow up
- Analytical procedures
- Auditing Enzyme operations

Our Proposal:

We propose, in the absence of any mandatory regulation in India so far, AISE guidelines can be adopted by the members as a self-regulated mechanism. This will also help us oppose any ad hoc or unscientific regulations that may be made by regulatory agencies in absence of any self – regulatory mechanism.