NATIONAL PRODUCT SAFETY GROUP

UK practitioner experts for product safety & compliance

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Advice to Trading Standards Authorities regarding Boron found in Slime and Putty V2

Trading standards officers have made OPSS aware of circumstances where the results for boron content in slime and putty toys may differ depending on the interpretation of the toy test standard (BS EN 71-3 'Migration of Certain Elements') by the test house selected by business or local authorities. In some cases, this has led to a dispute over the passing or failure of particular slime and putty toys.

The reason for this disparity is most likely due to misinterpretation of the test standard. Different approaches to sample preparation may occur if a sample has not been properly assessed using the test standard guidance to determine whether a dewaxing step is required. In some cases, the classification of a toy material as 'dry, brittle, powder-like or pliable' or as 'liquid or sticky' can be disputed, resulting in the application of different boron migration limits, as set out in the Toy Safety Directive.

The BSI Safety of Toys (CW/15) Committee responsible for the interpretation of EN 71-3 has advised that each toy material must be assessed on a case-by-case basis to determine its categorisation and whether a dewaxing step is necessary. The recently revised version of EN 71-3:2019 is more explicit in how toys should be assessed, particularly for those materials demonstrating hydrophobic characteristics such as silicone. In respect to the categorisation of slime and putty toys, the BSI Committee recognised there are difficulties for some slime toys and a request for further clarification was submitted to the CEN working group to address this matter and ensure consistent interpretation of a standard within the European market. In addition to this request, the CEN working group are also addressing the consideration of foreseeable use when categorising slime products.

The BSI Toy Safety Committee also provided a view on the exposure risk for boron from these types of toys. It was acknowledged that the health risk associated with the misclassification of slime products is not significant due to the highly conservative values used to calculate the threshold limits.

OPSS guidance and updates:

Where officers obtain contrary EN 71-3 test reports for boron migration, it is advised to consider whether an accurate assessment of the requirement for a dewaxing step was undertaken. Where

there is a dispute over the classification of materials^{1,} then under the precautionary principle, the manufacturer/importer should be advised to remove the toy from sale, pending further clarification from the relevant BSI and CEN committees. CEN have now provided comment on the two requests for clarification and this advice will be updated once BSI has released the interpretations.

If further measures are necessary to recall a toy from the market, this will require a risk assessment on a case-by-case basis. For officers considering prosecution they would need to consult an expert toxicologist if a defending company challenged the risk of harm.

At the Toys ADCO meeting (April 2019), the expert group on toy safety provided clarification on the notification of non-compliant slime toys on Rapex. All slime toys with a boron migration limit value greater than 300 mg/kg (the legislative limit) should be notified on Rapex, however, those measuring greater than 600 mg/kg boron are considered a 'serious risk' and should be listed under GPSD Article 12.

¹ This includes cases where (a) the toy exceeds the lower migration limit value for boron as a 'liquid or sticky' but not as a 'dry, brittle, powder-like or pliable', and (b) the toy has been handled for a period of time to account for foreseeable use and liquid/sticky properties are subsequently demonstrated.