TÜV Rheinland LGA Products - Information 11/2018

Changes with regard to the evaluation of micro plastics and synthetic polymers by Ökotest

Micro plastics and synthetic polymers

Micro plastics and synthetic polymers in foodstuffs (mineral water) have been detected on a scale of 1-500 µm. The Blue Angel defines the range for cosmetics (rinse-off products) as somewhat higher and specifies orders of magnitude for micro plastics between 100 nm and 5 mm with low water solubility.

In addition to tyre debris, plastic beverage bottles etc. cosmetic products, detergents and cleaning agents also make emissions into the environment.

Up until now, both synthetic polymers and micro plastics such as:

Polyethylene, Acrylates Copolymer, Acrylates Crossploymer-4, Hydroxyethylcellulose, Acrylates/C10-30 Alkyl Aceylate Crosspolymer, Styrene/Acrylates Copolymer, Sodium Polyacrylate, Polyethylene Terephthalate, Nylon, Polyacrylate, Polystyrene, Polyquaternium-Verbindungen, Polypropylene, Polymethyl Methacrylate, Carbomer; Acrylamidopropyltrimonium chloride/Acrylates Copolymer, Acrylates Copolymer/Beheneth-25 Methyacrylate Copolymer

in rinse-off cosmetics, detergents and cleaning agents were devalued by 2 marks by Ökotest as “further defects”.

Due to preventative environmental protection this evaluation has been made more stringent.

Therefore, starting in November 2018 microplastic particles that are used as abrasives in peels, shower gels or toothpastes will be devalued by 4 marks in the “further defects” test result.

Regardless of their use in leave-on or rinse-off products, synthetic polymers will be devalued by 2 marks in the “further defects” test result. In the process, there is no dependence of solubility, degradability or physical condition of the polymer.

The overall Ökotest evaluation is thus devalued by one mark if the test result under “further defects” is only “satisfactory” or “adequate”.

Currently, the list includes 67 plastics or synthetic polymers. However, this list may be expanded depending on the level of knowledge and must not be regarded as the final word. Please see:

http://www.beatthemicrobead.org/wp-content/uploads/2018/01/Microplastic-Ingredients.pdf

Regardless of the re-evaluation of synthetic polymers, the previous depreciations of PEG/PEG derivatives and silicones in leave-on products shall remain unchanged under the "ingredients test result".

PEG/PEG derivatives in leave-on products → 2 marks

PEG/PEG derivatives in rinse-off products → 1 mark

Silicones in leave-on products from 1% on → 1 mark

Silicones in rinse-off products are evaluated as synthetic polymers under the heading of "further defects" with a devaluation of 2 marks.

(For instance, the following substances are defined as silicones: cyclopentasiloxanes (D5), dimethiconol, dimethicones, amodimethicones and corresponding copolymers, phenyl trimethicones and silicone quaternium 22.)

This new rule also has effects on the relevant assessments with regard to Ökotest evaluation for retailers.

Further technical information is available from:

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