Short information notice on the status of azo pigments classified as WGK 3 in Germany

This communication is based on the two publications “Einstufung von Azopigmenten in Wassergefährdungsklasse 3 – Mitgliederinformation” and “Fact Sheet and Current Situation: Classification of Azo Pigments in Water Hazard Classes”, both kindly provided as reference to ETAD by the association VdMi. For further details on the topic, the two documents can be found at http://vdmi.de/deutsch/mediathek/pigmente-und-fuellstoffe.html and http://vdmi.de/englisch/media-library/pigments-and-fillers.html, respectively.

In a nutshell

- The recent classification of some organic pigments as WGK 3 in Germany does not reflect their actual lack of bioavailability, supported by all existing scientific evidence
- The re-evaluation of this classification is already taking place
- Implementation of the changes related to equipment or warehousing required by the classification has first to be directed by the authorities
- Companies should wait and, in case of corresponding requests from authorities, refer to the officially communicated re-evaluation process
- The new classification must, however, be specified in the SDS

Background information

What does WGK 3 mean?

In October 2014 the German Commission for the Evaluation of Water-Polluting Substances (KBwS) decided that the class of compounds „Azo dyes/azo compounds with an amino component that can be potentially released due to reductive azo cleavage and needs to be classified as carcinogenic (R45 and H350), respectively had to be assigned the classification in water hazard class (WGK) 3, i.e., the highest hazard.

Which pigments are affected and how?

This entry was found under identification no. 9001 in the Rigoletto database of the German Federal Environment Agency (UBA). The following pigments are explicitly named in this group entry:

• C.I. Pigment Yellow 12 (CAS no. 6358-85-6)
• C.I. Pigment Yellow 13 (CAS no. 5102-83-0)
• C.I. Pigment Yellow 14 (CAS no. 5468-75-7)
• C.I. Pigment Yellow 83 (CAS no. 5567-15-7)
• C.I. Pigment Yellow 174 (EC no. 911-715-0)
• C.I. Pigment Yellow 188 (CAS no. 72207-62-6)
• DCB-AAA-AAOT (CAS no. 68910-13-4)
• C.I. Pigment Orange 13 (CAS no. 3520-72-7)
• C.I. Pigment Orange 34 (CAS no. 15793-73-4)
This new classification means, in particular, a relevant change in the requirements for the storage of the substances.

**What is the current status?**

This new stringent classification makes no sense when considering the eco/toxicological properties of organic pigments. For this reason, the German manufacturers of azo pigments (represented by the VdMi) and the German Chemical Industry Association (VCI) jointly addressed the Federal Environment Agency (UBA) and the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) – in order to present the expert arguments which show that the azo pigments should be deleted from the group entry, as classification in WGK 3 is not justified in scientific terms.

The inclusion of azo pigments in the above group entry is derived from the MAK entry for azo colorants. For this reason, the VdMi contacted the MAK Commission – with the result that the review of the entry was officially announced on 1 July 2017 in the yellow pages of the MAK and BAT values list, where azo pigments are concerned. Manufacturers are expecting the review to bring clarification for azo pigments, as data are available to substantiate that they are different from dyes in their bioavailability. Thus, also the suspicion of a carcinogenic potential could be dispelled.

As a result of the discussion with authorities, the MAK-entry on azo colorants is being re-evaluated with regard to azo pigments. Therefore the basis for the WGK decision might change in the near future, with a corresponding effect on the pigments' classification.

**When dealing with these pigments, what should a company do?**

According to paragraph 67 of the AwSV, changes in the factory or warehouse are not needed unless the authorities are ordering it. The present permission is valid and lasts until the next inspection. However, if authorities during or after an inspection ask companies to meet the new requirements, in particular as regards possible plant modifications, we advise to refer in a first instance to the still ongoing discussion in the MAK and to the fact that the WGK 3 classification is still debated even after its publication in the Bundesanzeiger. In support to this position companies can use the official announcement of the revision of the azo colorants’ MAK entries in the BAT as well as in the MAK lists.

As regards the pigments information in the SDS, it has to reflect the new classification officially published in “Bundesanzeiger”, i.e. the water hazard class has to be adjusted to WGK 3.