Chlordane Nomenclature Change

August 2011

Dear Valued Customer,

In an effort to eliminate confusion and stay current with the most correct nomenclature, the description for CAS 5103-71-9 will be cis-chlordane and that for CAS 5103-74-2 will be trans-chlordane on all certificates and documents from Restek, going forward. The reason for this nomenclature change is to standardize with CAS, NIST, and EPA, who all use these descriptions for the compounds in question. The issue is explained in EPA Method 8081B, Section 11.6.2, as follows.

11.6.2 Chlordane -- Technical chlordane is a mixture of at least 11 major components and 30 or more minor components that have been used to prepare specific pesticide formulations. The nomenclature of the various forms of chlordane has been the subject of some confusion in both Agency methods and the open literature for some time. The CAS number for technical chlordane is properly given as 12789-03-6. The two most prevalent major components of technical chlordane are cis-chlordane, CAS number 5103-71-9 and trans-chlordane, CAS number 5103-74-2. The structure represented by trans-chlordane has on occasion been mistakenly referred to by the name gamma-chlordane, and a separate CAS number of 5566-34-7 has been assigned by CAS to that designation. For the purposes of the RCRA program, the name gamma-chlordane is not generally used, and when reporting technical chlordane it is important to distinguish the difference between the trans and gamma isomers.

The exact percentages of cis-chlordane and trans-chlordane in the technical material are not completely defined, and are not consistent from batch to batch. Moreover, changes may occur when the technical material is used to prepare specific pesticide formulations. The approach used for evaluating and reporting chlordane results will often depend on the end use of the results and the analyst’s skill in interpreting this multicomponent pesticide residue. The following sections discuss three specific options: reporting technical chlordane (CAS number 12789-03-6), reporting chlordane (not otherwise specified, or n.o.s., CAS number 57-74-9), and reporting the individual chlordane components that can be identified under their individual CAS numbers.

If you have any questions, please contact our Technical Service group (support@restek.com or 800-356-1688, ext. 4) or your Restek representative.

Thank you for choosing Restek products; we look forward to serving you.

Sincerely,

Joe Konshnik
Environmental Market Development Manager

Steve Kreiser
Director of Quality

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