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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, N.C. 27709

OFFICE OF
THE SCIENCE
ADVISOR

September 6, 2013

Patsy Root, Chair
Environmental Laboratory Advisory Board
IDEXX Laboratories, Inc.
1 IDEXX Drive
Westbrook, ME 04092

Dear Ms. Root:

On behalf of the Forum on Environmental Measurements (FEM), I would like to thank the Environmental Laboratory Advisory Board (ELAB) for making us aware of concerns regarding the inconsistent naming and identification of a specific organic compound of concern.

The FEM was able to discuss the June 24, 2013 letter from ELAB on the issue of inconsistent naming and identification during our quarterly meeting on Tuesday, July 23, 2013. We determined there were four programs appropriate to comment on their use of naming for the compound in question – 2,2'-oxybis(1-chloropropane) with Chemical Abstracts Registry Number (CASRN) 108-60-1. Attached is a summary of each program's course of action.

We want to thank you and the other members of ELAB for all the work you do to assist the Agency in improving environmental programs. Please continue to send us your comments and suggestions, since ELAB serves as an important mechanism for the FEM to keep abreast of important issues facing the monitoring community and to receive the community's input on our activities.

If you have any questions, please feel free to contact me by e-mail at phelps.lara@epa.gov or by telephone at 919-541-5544.

Sincerely,

A handwritten signature in blue ink that reads "Lara T. Phelps". The signature is fluid and cursive.

Lara Phelps
Director, FEM

Attachment

Office of Chemical Safety and Pollution Prevention (OCSPP) / Office of Pollution Prevention and Toxics (OPPT)

Although the letter reads as though people have a choice of which two names to use for these Chemical Abstracts Registry Numbers (CASRN), in OPPT's view, they do not.

The proper chemical identities are as follows:

- CASRN 108-60-1 has the CA Index name "Propane, 2,2'-oxybis[1-chloro-"
- CASRN 39638-32-9 has the CA Index name "Propane, 2,2'-oxybis[2-chloro-"

These two substances are structural isomers of each other (one is the 1-chloro isomer and the other is the 2-chloro isomer). So, while they are very similar, they are definitely two different substances (CAS nomenclature conventions will always make these distinctions). This said, the recommendation in the attachment to the Environmental Laboratory Advisory Board (ELAB) letter is correct in that the correct chemical name for CASRN 108-60-1 is "Propane, 2,2'-oxybis[1-chloro- [same as 2,2'-oxybis(1-chloropropane)]. The language for the recommendation should be stronger than "more appropriate". It is not a matter of appropriateness, but a matter of correctness. The two substances are correctly displayed in the Toxic Substances Control Act (TSCA) inventory. Individuals are welcome to run their chemicals by OPPT for an accuracy check with respect to the TSCA inventory.

Office of Solid Waste and Emergency Response (OSWER) / Office of Resource Conservation and Recovery (ORCR)

In order to be consistent with the Integrated Risk Information System (IRIS) and Resource Conservation and Recovery Act (RCRA) regulations (i.e., 40 Code of Federal Regulations [CFR] Part 264 Appendix IX), ORCR feels it is important to list both common and CAS index names for the chemical. The language below is included in Section 1 and Appendix A for four of the Update V organic methods with this chemical:

Chemical name was changed by the Integrated Risk Information System (IRIS) on November 30, 2007 from bis(2-chloroisopropyl)ether to bis(2-chloro-1-methylethyl)ether (common name). This compound is also known as 2,2'-oxybis(1-chloropropane) (CAS index name). See the link at <http://www.epa.gov/iris/subst/0407.htm>, Section VII for the "Revision History" and Section VIII for "Synonyms" of this chemical.

Office of Solid Waste and Emergency Response (OSWER) / Office of Superfund Remediation and Technology Innovation (OSRTI)

Earlier this year, OSRTI identified a problem with bis(2-chloroisopropyl)ether during our review of the new Statement of Work (SOW) for Organic Superfund Methods (SOM02.0), Exhibit C analyte list. The problem was that this name could be associated with two different CAS numbers. After a review of the method references and earlier

EPA documents, OSRTI decided the analyte described by CASRN 108-60-1 is the correct analyte, and the most correct International Union of Pure and Applied Chemistry (IUPAC) name is 2,2'-oxybis(1-chloropropane). In doing so, OSRTI reached the same conclusion as ELAB. The draft Contract Laboratory Program (CLP) SOW SOM02.0, posted on the website at <http://www.epa.gov/superfund/programs/clp/som2.htm>, reflects our agreement with the ELAB decision.

Office of Water (OW) / Office of Science and Technology (OST)

The EPA Office of Water's, Office of Science and Technology, Engineering and Analysis Division (EAD) agree with the recommendation from ELAB that 40 CFR 136 contains an error with regard to the compound listed as "2,2'-oxybis(2-chloropropane) [also known as bis(2-chloroisopropyl) ether]" in Table 1C. EAD will propose to change the name to 2,2'-oxybis(1-chloropropane) during the next Method Update Rule Proposal. This will make the analyte name consistent with the compound name used in OSWER's CLP Semivolatile Target Compound List. EAD will also propose to change the corresponding analyte name in Method 611. Currently, Method 611 has an analyte name of bis(2-chloroisopropyl)ether, with 108-60-1 listed as the CAS Number. The CAS number is for the compound 2,2'-oxybis(1-chloropropane), not bis(2-chloroisopropyl)ether. The CAS number is correct, but the analyte name is wrong.