LAB Alkylate Bottoms CAS 94094-93-6:

This message is regarding a linear alkylbenzene (LAB) alkylate bottoms product CAS 94094-93-6 that is categorized as a priority chemical on the Domestic Substance List. The message is being sent on behalf of CEPSA Quimica, S.A., a Spanish company that is a world leader in LAB production, with an LAB plant in Canada (Bécancour – Québec). The LAB alkylate bottoms, a co-product of the manufacture of LAB, are used primarily in closed system oils (refrigeration/heat transfer fluids, transformer/ dielectric oil), lubricating oils, marine fuels and other occupational settings. LAB is used to produce linear alkylbenzene sulfonate (LAS), a major cleaning agent (surfactant) used in laundry and cleaning products in Canada and worldwide.

In providing this information on LAB alkylate bottoms, CEPSA is supported by CLER, the Council for LAB/LAS Environmental Research, an organization of scientists and technical specialists representing manufacturers of LAB, LAS and LAB alkylate bottoms. CLER's mission is to conduct research and distribute scientific information on the environmental and human safety of these materials.

The LAB alkylate bottoms are a well documented product, with an IUCLID data set and SIDS Initial Assessment Report (SIAR) approved by the US EPA and provided to OECD for review and discussion at the OECD meeting in Ottawa, October 14-17, 2008. Based on the extensive data available, we are providing the following information with the request that the information be used to update the categorization of LAB alkylate bottoms CAS 94094-93-6 on the DSL:

<u>Inherently Toxic to Aquatic Organisms?</u>

Quoting from the SIAR (July 15, 2008):

> Acute toxicity to several species of fish, Daphnia, and algae has been evaluated for LAB and two of the LAB alkylate bottoms. Studies conducted with fish using solvents to enhance the solubility resulted in no effects at nominal concentrations up to 1000 mg/L. Similarly, new studies conducted on LAB alkylate bottoms using water accommodated fractions (WAF) demonstrated no adverse effects at 100% WAF (loading rate = 1000 mg/L). In addition to WAFs, studies on Daphnia and algae demonstrated no effects at saturation. Studies with C10-LAB, the most water soluble component of LAB alkylate bottoms, show that these materials are not toxic at the limits of water solubility. ECOSAR modeling of key constituents also confirms that LAB alkylate bottoms are not predicted to be toxic at saturation The lack of acute aquatic toxicity at water soluble concentrations has been confirmed with the most water soluble component of the LAB alkylate bottoms, C10 LAB.

Based on the weight of available evidence, LAB alkylate bottoms should be categorized as “no” for inherently toxic to aquatic organisms.

Bioaccumulative?

Quoting from the SIAR (July 15, 2008):

> Predicted bioconcentration factors (BCFs) are 3.2 (estimated using EPI Suite v.3.20). In addition, because of the rapid metabolism of linear alkyl chains, LAB and LAS, and the presence in all LAB alkylate bottoms component structures of linear alkyl chains with unblocked terminal carbons, LAB alkylate bottoms are expected to show low bioaccumulation, similar to LAB and LAS.

Based on the weight of available evidence, LAB alkylate bottoms should be categorized as "no" for bioaccumulative.

Meets Environmental Criteria for Categorization?

Based on the weight of evidence presented above demonstrating that LAB alkylate bottoms are not inherently toxic to aquatic organisms and not bioaccumulative, the LAB alkylate bottoms should be categorized as "no" for Meets Environmental Criteria for Categorization.

We respectfully request that the information cited in this message be used to update the categorization of LAB alkylate bottoms CAS 94094-93-6 on the DSL and that this information be retained in the CEPA DSL file on this material.

Additional information sources

Additional information on LAB alkylate bottoms may be found at the websites for Ecosol (http://www.lasinfo.org/) and CLER (www.cler.com).