Cornell Dubilier

Office of Product Compliance

140 Technology Place

Liberty, SC. 29640

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Regarding the Usage of Boric Acid in Aluminum Electrolytic Capacitors

Boric acid is a well-known substance due to a rich history highly regarded for its number of uses [1]. Capacitor manufacturers have used boric acid in their electrolytes for decades, and Cornell Dubilier is no exception. In 2010, ECHA, the European Chemicals Agency, declared boric acid a substance of very high concern [2]. When combined with ethylene glycol, boric acid [3], and some other derivatives [4] [5], create new substances that are understood to be materially different from the initial reactants [6]. These reactions, known as “esterifications,” have been documented in the literature for several decades [1] [7] [8] [9] [10].

Many companies are positioning themselves to rely on FMDs, full material declarations, to determine their parts’ content. Material declarations contain a wealth of information for technical experts. However, without proper interpretation and knowledge of testing methodologies, these documents are prone to misunderstandings.

In the event ECHA moves to name these substances, we will notify our customers as part of Article 33 of EU REACH, the “duty to notify.”

Signed,

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References

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[5] European Chemicals Agency, "Substances Infocard - Disodium tetraborate, anhydrous," 22 January 2021. [Online]. Available: https://echa.europa.eu/substance-information/-/substanceinfo/100.014.129.

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