

Project Summary:

Ion Chromatography of Five Bare Boards

DfR Solutions was asked to perform ion chromatography testing on five bare boards to determine levels of contamination incurred during manufacturing. Boards were tested for anion, cation, and weak organic acid concentration according to IPC-TM-650 2.3.28 specification. The test yielded that the highest levels of contamination were malic and propionic acid, with no contaminant exceeding the recommended levels. According to IPC specification, these boards represent an acceptable level of cleanliness and the manufacturer could be confident in its manufacturing process.

Keywords: Ion chromatography, IPC-TM-650 2.3.28, cleanliness, contamination, compost epoxy matrix board, anion, cation, weak organic acid, isopropyl alcohol, isopropanol, Metrohm, standards, fluoride, acetate, chloride, nitrite, bromide, nitrate, phosphate, sulfate, lithium, ammonium, sodium, potassium, calcium, magnesium, adipic, butyric, benzoic, citric, glutaric, lactic, melonic, malic, oxalic, succinic, formic, propionic, maximum level, chromatogram, solution, concentration, ppm