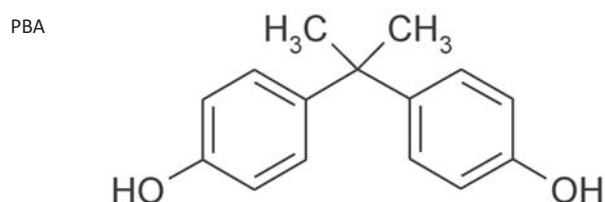


Bisphenol A (PBA)

Bisphenol A (BPA) has been used extensively in the manufacture of polycarbonate bottles and containers since the 1930's, but has been recently classified as a hazardous substance by Canadian regulatory agencies due to its endocrine disrupting capabilities. The advisory was based on the detection of BPA at levels considered to cause harmful health effects especially noted in infants and young children. As a result, many department stores and suppliers are voluntarily removing all polycarbonate baby bottles and drinking containers from their shelves. Baby bottles have come under concern since BPA was detected at low levels when the plastics were exposed to boiling water and/or microwave heating. In food and baby formula containers, BPA has been used in the inside liners of cans, where there is direct exposure of the contaminant to the food source. The degree of leaching into the formula at normal temperatures is under investigation in various countries to determine the exposure and risk to infants and young children. The EPA has a current exposure guideline limit of 50 µg/kg/day, however, health effects have been observed at levels as low as 0.025 µg/kg/day.

Activation Laboratories has recently developed a highly sensitive LC/MS method to quantify the amount of Bisphenol A present in leachates from polycarbonate baby bottles and other containers. This popular in-house method is capable of detection of BPA in the low parts per trillion (ppt) range, with a calibration curve spanning 50 parts per trillion to 100 parts per billion.



Calibration Range: 50 ppt - 100 ppb

