

Centennial Honors College
Thomas E. Helm Undergraduate Research Day 2024

ABSTRACT

Major: Forensic Chemistry

Poster

Faculty Mentor(s): Brian Bellott

GC-FID Quantification of Benzothiazole

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Recycled tires are increasingly being used as a material for padding in playgrounds or sports fields. Although it is an affordable material and provides a softer padding than concrete; tires do contain several hazardous chemicals. One of the most common is benzothiazole which is known to be toxic. The purpose of this project is to develop a method for the quantification of benzothiazole by GC-FID. Once that method is developed, tire samples will be collected and examined for the concentration of benzothiazole to see if the toxic material is being leached into the playground from the recycled tire material.