

Application Bulletin UVP-AB-207

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APPLICATION:

Testing for sulfa residues.

WAVELENGTHS/ LAMPS USED:

Longwave 365nm/CC10 with UVL-56

FIELDS OF USE:

Pork Production

BACKGROUND:

Sulfamethazine, a carcinogenic antibacterial, is sometimes used by farmers to induce weight gain and combat disease in swine sometimes use Sulfamethazine, a carcinogenic antibacterial. The Sulfa on Site test is employed by the United States Department of Agriculture Food Safety and Inspection Service, and many private interests to monitor swine urine, blood or feed for possible violative levels of Sulfamethazine residues. Wide spread use of the Sulfa On Site test followed a report issued by the National Center for Toxicological Research in January 1988 that documented the carcinogenic properties of Sulfamethazine.

PROCEDURE:

The Sulfa On Site is an application of Thin –Layer Chromatography (TLC). Appropriate samples are collected (from urine, blood or feed) and spotted onto the TLC plate along with high and low standard solutions of known identity and concentration. The plate is then migrated, fixed, developed and read. Presence of Sulfamethazine is determined by fluorescing the TLC plate in the UVP CC10 Ultraviolet Cabinet and comparing unknown samples against known standards

PRIMARY ADVANTAGES OF THIS METHOD:

The Sulfa On Site is a simple, fast and economical procedure that ultimately helps to reduce the amount of carcinogenic compounds in our food supply.