

pyradiazinone ring-labeled [¹⁴C]pyrazon in sterile aqueous buffers at pH 5, 7, and 9.

4. No additional information on the hydrolysis of pyrazon is needed at this time.

METHODOLOGY:

Pyrazon (purity >99.5%, BASF) was spiked (125:5, w:w) with pyradiazinone ring-labeled [¹⁴C]pyrazon (labeled in the 4- and 5-C positions; radiochemical purity ≥97.7%, specific activity 953271 dpm/ug, BASF), then added at 50 ppm to aqueous buffer solutions that had been adjusted to pH 5 (0.1 M sodium acetate), 7 (0.1 M sodium phosphate), or 9 (0.1 M sodium borate/HCl). Aliquots of the buffered test solutions were filter-sterilized (0.22 um) while being transferred into sterile bottles. The bottles were sealed with sterile teflon septa, and the treated solutions were incubated in the dark at 25 ± 1 C (77 ± 1.8 F). Duplicate or triplicate samples were removed for analysis at 0, 8, 15, 22, and 30 days posttreatment.

The samples were analyzed for total radioactivity using LSC, and for specific compounds using HPLC and TLC. The HPLC column was eluted with methanol:water (60:40, v:v) and was equipped with radioactivity and UV detection (287 nm). The Whatmann LK5F Linear K TLC plates were developed in one-dimension only using either n-hexane:acetone (6:4, v:v) or toluene:methanol (7:3, v:v); [¹⁴C]residues on the plates were located using radioscanning.

DATA SUMMARY:

Pyrazon (purity >99.5%) plus pyradiazinone ring-labeled [¹⁴C]pyrazon (radiochemical purity ≥97.7%), at 50 ppm, did not hydrolyze in sterile pH 5, 7, and 9 buffered solutions that were incubated in the dark at 25 ± 1 C for 30 days (Table III). At 30 days posttreatment, pyrazon was the only compound detected in the buffered solutions. During the study, the material balances decreased slightly from 2.09-2.15 x 10³ dpm/uL to 2.02-2.07 x 10³ dpm/uL (Table II).

COMMENTS:

The pHs of the buffered solutions after the addition of the pyrazon stock solution and at the termination of the study were not reported.

PAGES 1.3 THROUGH 1.6 HAVE BEEN REMOVED FROM THIS DOCUMENT. THOSE PAGES
CONSIST OF REGISTRANT-SUBMITTED DATA.