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(54) **Title:** STABLE ENZYMATIC PERACID GENERATING SYSTEMS

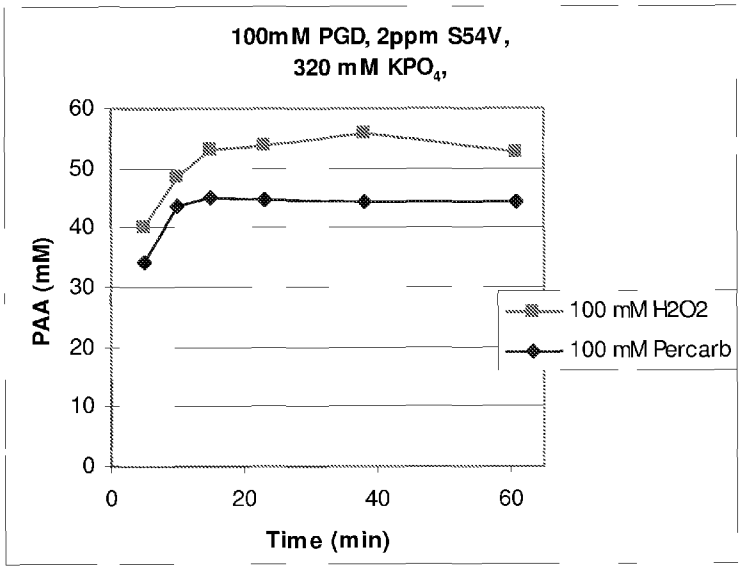


FIG. 1

(57) **Abstract:** The present invention provides stable compositions comprising a perhydrolase enzyme, a hydrogen peroxide source, and an ester substrate that efficiently generate aqueous peracid solutions. The generated peracid solutions are suitable for decontaminating and/or sanitizing a wide range of materials and equipment contaminated with pathogens or toxic chemicals. In one preferred embodiment, the stable composition comprises an acyl transferase enzyme, sodium percarbonate, and propylene glycol diacetate, and is stable for 30 days or longer. Upon addition to water, the composition is activated and generates an aqueous solution with a high ratio of peracetic acid to acetic acid.

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