

Research about a activity Measurement method of an Enzyme combination detergent

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Abstract

As gravity of environmental pollution problem by chemistry detergent is risen, market scale of high-quality enzyme detergent that alkaline protease, alkaline cellulase, alkaline lipase are added is increase weight with the fast speed (annually 10%). Standard method for estimating the amount of enzyme added to detergents are not available in domestic, outside standard (ISO, BIS, JIS) because industry enzyme is depending on vast quantity income. Therefore, standardization of enzyme activity measurement method in the enzyme detergents for domestic, outside enzyme detergent is concerned in normalize method of measurement of enzyme detergent. This research probed enzyme activity measurement method in enzyme detergents, domestic enzyme detergent, company's enzyme activity. Producing experimental data for environmental burden and expense brought by microzyme, we quantity and normalize the enzyme activity in enzyme detergent and wish elaborate a KS standard to help the consumerism.

References

1. Twining, S. S. (1984), *Anal. Biochem.* **143**, 30.
2. Wiesner, R., et al. (1982), *Anal. Biochem.* **121**, 290.
3. Samal, B. B., Karan B., Stabinsky Y. (1990), Stability of two novel serin protease in commercial laundry detergent formulations, *Bio-technol. Bioeng.* **35**, 650-2.
4. G Sarath, et al. (1989), Protease assay method "proteolytic enzymes - A practical Approach"
5. Habeeb, A. F. S. A. (1996), *Anal. Biochem.* **14**, 328.
6. Cress, D., Shultz, J., and Breitllow, S. (1993), *Promega notes* **42**, 2.
7. Folin, O., and Ciocalteu, V. (1929), *J. Biol. Chem.* **73**, 627.