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**Product Information** 

## a-Amylase, Heat-stable

For use in Total Dietary Fiber Assay Kit, TDF100A

#### A3306

## **Product Description**

CAS Registry Number: 9000-85-5

Enzyme Commission (EC) Number: 3.2.1.1

Synonym: 1,4-a-D-Glucan-glucanohydrolase

a-Amylase breaks down starch into sugars, by hydrolysis of the a- $(1\rightarrow4)$  glucan linkages in polysaccharides of three or more a- $(1\rightarrow4)$  linked D-glucose units, without hydrolyzing the a- $(1\rightarrow6)$  bond. a-Amylase occurs in many natural sources, including animals, plants, and notably in microorganisms, such as various *Bacillus* species.<sup>1</sup>

α-Amylase is well-known as a heat-stable enzyme.<sup>2</sup> For example, α-amylase from *Bacillus licheniformis* NCIB 6346 has been reported to maintain >98% of activity after 60 minutes at pH 6.2 at 85 °C.<sup>3</sup>

Various publications have reported use of this product for dietary fiber analysis.<sup>4-17</sup> Several theses<sup>18-25</sup> and dissertations<sup>26-32</sup> have cited use of product A3306 in their protocols.

### Product

This product is supplied as a solution. Each lot is carefully use-tested for suitability as a component in the Total Dietary Fiber Assay Kit (Cat. No. TDF100A).

## Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

## Storage/Stability

It is recommended to store A3306 at 2-8 °C.

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1



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