

# Ammonium Sulfate (APS)

Cat# C3009 – 100 g / C3010 – 500 g

## **INTRODUCTION**

Ammonium persulfate (APS) is a widely used reagent in biochemistry and molecular biology for the preparation of polyacrylamide gels. This product is designated as Electrophoresis grade and has been tested for suitability as a catalyst in acrylamide polymerization.

APS forms oxygen free radicals in aqueous solution by a base-catalyzed mechanism. The bases, are most commonly used as catalysts, are tertiary amines such as N,N,N',N'-tetramethylethylenediamine (TEMED) or 3-dimethylaminopropionitrile (DMAPN). The free radicals will cause the polymerization of acrylamide and bis-acrylamide to form a gel matrix, which can be used for separating macromolecules by size. Protocols for the use of APS to prepare polyacrylamide gels for electrophoresis are widely available.

## **INFORMATION**

Synonyms: AP; Ammonium peroxodisulfate; APS; PER; Ammonium Peroxydisulfate; Ammonium persulfate

Molecular Formula:  $(\text{NH}_4)_2\text{S}_2\text{O}_8$

Molecular weight: 228.20 g/mol

Physical State: Solid

Appearance: White to off-white crystalline powder

Odor: Unpleasant (Slight)

## **STORAGE**

Store at room temperature.

Fresh solutions of this product should be prepared for the most effective use in electrophoresis.

Solutions stored at room temperature are not stable even if protected from light or air.

Storage of solutions at 2-8 °C will allow to use for up to 12 hours.

## **PRODUCT USE LIMITATION**

These products are intended for research use only.