Agars and Agaroses

Agar

A natural product extracted and isolated from seaweeds, agar is widely used in the food industry, in cosmetics and for microbiology. Applications include use as a thickener, gelling agent, binding agent, suspension agent and as a stabilizer.

Alfa Aesar offers a general purpose grade Agar (A10752) which finds use mainly as a gelling agent in the preparartion of plate culture media for the growth, identification and enumeration of micro-organisms.

H26724 Agar, plant cell culture tested
This material is specifically purified to remove haemolytic substances and impurities inhibitory to growth. It is tested to verify performance and is suitable for culture and sensitive micro-organisms and for in vitro plant cell culture. It has the added advantages of excellent transparency hysteresis and batch to batch consistency.

Agarose

Agarose is a neutral polysaccharide extracted from agarophyte seaweeds. Its chemical structure gives agarose the capacity to produce very strong gels at relatively low concentrations. The gels formed have a macroreticular structure with a very open mesh, which can be adjusted by varying the concentration of agarose. The hydrogen bonding in these gels make them thermo-reversible (i.e. they melt when heated). The absence of ionic groups make the gels a neutral environment, so hydrophilic macromolecules migrating through them are not inhibited. Agarose is, therefore, an ideal medium for use in separation of biological macromolecules such as proteins and nucleic acids. Agarose is widely used in molecular biology for immunodiffusion, electrophoresis, gel chromatography and for growth of protein crystals.

Alfa Aesar's range of agaroses covers a variety of molecular biology applications.

H26855 Agarose D1-LE, molecular biology grade
A good general purpose agarose for molecular biology applications. It has a low electroendosmosis (EEO) and high electrophoresis mobility. Suitable for analytical and preparative nucleic acid electrophoresis, blotting and protein electrophoresis.

H26738 Agarose MS8, molecular sieve grade, for small DNA fragments
A grade of agarose for molecular screening that improves resolution of small DNA fragments and polymerase chain reaction (PCR) products. This grade produces a gel of improved clarity, enhancing visibility. Gels are easier to handle, as the gel strength is higher, so they are less likely to crack or break. High gel strength makes it ideal for use in blotting.

H26417 Agarose, LM, low melt, for recovery of samples after separation
This grade has a low melting temperature and the highest resolving capacity for DNA fragments smaller than 1000 bp, especially PCR products ranging from 200-800 bp, making it ideal for preparative electrophoresis and for analysis and recovery of small DNA fragments. LM agarose is ideal for "In-Gel" enzymatic processing (digestion, ligation, PCR). The gels have good strength, making them easy to handle even at concentrations as low as 2%.