

# D-2

D-2 Agarose has a higher gelling temperature than D-1 Agarose and Low EEO\*. This gives higher thermal stability to the gels.

## Features

- Extraordinary mechanical resistance for more reliable and easier handling.
- Possibility of varying pore size in accordance with particle size by modifying the gel concentration.
- Easy preparation of the gel by simple dissolution in aqueous buffers either by standard boiling or microwaving.
- Greater thermal stability due to high hysteresis (difference between gelling and melting temperatures).
- Excellent transparency of the gels.
- Excellent elasticity and flexibility of the gels.
- Great capacity for derivatization and cross-linking, which allows coupling of enzymes, antigens and other substances to the gel structure.
- Exceptionally low absorption of staining agents.
- Absence of toxicity (the alternative is polyacrylamide which can be toxic).

## Applications

- D-2:**
- Nucleic acid electrophoresis.
  - Protein electrophoresis (immunoelectrophoresis and counterelectrophoresis).
  - Preparation of agarose beads.

## Specifications and Functional Tests

| D-2                                    |                 |
|--|-----------------|
| Moisture                               | ≤ 8%            |
| Ash                                    | ≤ 0.4%          |
| EEO*                                   | ≤ 0.14          |
| Sulfate                                | ≤ 0.2%          |
| Clarity 1.5% (NTU)                     | ≤ 4             |
| Gel Strength 1% (g/cm <sup>2</sup> )   | ≥ 900           |
| Gel Strength 1.5% (g/cm <sup>2</sup> ) | ≥ 1200          |
| Gelling Temperature 1.5% (°C)          | 42±1.5          |
| Melting Temperature 1.5% (°C)          | 87±1.5          |
| DNase/RNase activity                   | None detected   |
| DNA resolution ≥1000bp                 | Finely resolved |
| Gel background                         | Very low        |

\*EEO (electroendosmosis)

# FP DNA

Finger Printing DNA Agarose is a powerful tool in laboratories performing forensic testing, paternity determination, cell line verification, tissue typing, etc. FP DNA Agarose meets all requirements for DNA identity applications.

## Features

- Low EEO.
- High gel strength, forming easy-to-handle gels.
- No DNA binding.
- No DNase and RNase activity.
- Clear and sharp bands.
- High efficiency transfer for DNA (blotting).
- No smearing.
- No gel background.
- No variability in agarose quality and performance between batches.

## Specifications and Functional Tests

| FP DNA                               |  |
|--------------------------------------|--|
| Moisture                             | ≤ 7%   |
| Ash                                  | ≤ 0.4%   |
| Sulfate                              | ≤ 0.14%  |
| EEO*                                 | ≤ 0.13   |
| Gel Strength 1% (g/cm <sup>2</sup> ) | ≥ 1400   |
| Gelling Temperature 1.5% (°C)        | 36±15  |
| Melting Temperature 1.5% (°C)        | 88±1.5   |
| DNase/RNase activity                 | None detected  |
| DNA binding                          | None detected  |
| DNA background                       | None detected  |
| DNA resolution                       | Clean and sharp bands produced when a 23 kb DNA size Standard is electrophoresed transferred and probed. |

\*EEO (electroendosmosis)