

Application:

For Acrylamide and Agarose Gels

Composition (x6):

Bromphenol blue sodium Salt: 0,25 %

Xylene cyanol FF: 0,25 %

Ficol 400: 15 %

Storage condition:

Room temperature or -20°C

Information about DNA loading Dye:

The loading dye increases the density of the sample and they add colour to the sample, thereby simplifying the loading process. The solution contains dyes that, in a electric field, move toward the anode at predictable rates.

In 1% agarose gels, bromophenol blue migrates with 300 bp linear double-stranded DNA fragment, whereas xylene cyanol FF migrates at approximately the same rate as linear double-stranded DNA 4 kb length. These relationships are not significantly affected by the concentration (0.5 to 1.4%) of agarose in the gel.

The gel - loading buffer contains only one low concentration dye (bromophenol blue and xylene cyanol FF) to avoid masking the DNA Ladder fragments. But if the added dye is masking your signal because it is running on the same high in your gel, just dilute it more.

Application:

Loading dye 306-205 suits well for the DNA samples dissolved either in water or in EDTA-containing buffer (as TE buffer).

How to predilute a DNA ladder with the loading dye?

For DNA markers, apply 0.1 µg per 1 mm of agarose gel lane width. Often 1µg of marker is used in one electrophoresis run but it depends on the size of your gel and the comb.

If DNA markers are not prediluted with the Loading dye solution, then mix: The loading buffer is 6x concentrated, that means you have to use it 5:1.

DNA marker (GeneON's 1 kbp with 1µg/5µl): 6x Loading Dye Solution (GeneON's Loading Buffer DNA II): deionised water at a ratio 1:1:4 for example, 5 µl 1 kb ladder : 5 µl 6x loading dye : 20 µl water. By applying 30.0 µl of this mixture, you'll have 1.0 µg of total DNA per lane.

Order Information

Prod. No.	Description	Quantity
3906-205	DNA-Loading dye 6X	5 x 1 ml