# GRS Agarose S-LMT

#GA116.0100

(for research only)

**Product:** GRS Agarose S-LMT is a high purity low melting temperature agarose for analytical and preparative electrophoresis of small nucleic acids (50-1000bp), and for in-gel reactions.

**Applications:** GRS Agarose S-LMT works as a molecular screen and can discriminate between DNA fragments that differ only a few bp in length, and thus is able to compete with acrylamide gels, being much easier to handle as the latter. GRS Agarose S-LMT 3%-6% gels give similar results to polyacrylamide 6%-8% gels. For efficient resolution, the concentration should be adjusted to the range of band sizes analyzed, and the gel running buffer used. At lower concentrations (<2%), gels become fragile and difficult to handle. The low gelling temperature facilitates quantitative recovery of nucleic acids without cutting slices and/or the inclusion of thermo-labile substances, such as living cells or enzymes, in melted agarose.

**Quantity:** 100g

**Appearance:** white powder

**Storage:** Room temperature. Stable for at least 3 years.

**Specifications:**

DNAses/RNAses/Proteases……not detected
DNA Binding……not detected
Gel strength (4.0%)……>800g/cm$^2$
Gel point (4.0%)…… ≤35°C
Melting point (4.0%)…… ≤65°C
Moisture…… ≤7%
Ash…… ≤0.5%
Sulfate…… ≤ 0.13%
Clarity (4.0%)…… ≤6 NTU
EEO…… ≤0.13

**Instructions:**

1. Make sure to use a flask more than twice the size of the solution you will prepare
2. Add the desired volume of electrophoresis buffer to the flask
3. Weigh the desired amount of agarose and add to the flask. Swirl well.
4. Heat the mixture in a water bath until 70-80°C and then boil for 5-10 minutes with continuous stirring until the agarose is completely dissolved. Alternatively, heat the mixture in a microwave oven and boil it for 30 seconds. Swirl to resuspend remaining agarose particles and heat again in high power for 1-2 minutes (until the solution is clear and all particles are dissolved).
5. Remove from the microwave or heater, swirl again and allow the solution to cool down to ~60°C before adding any DNA stain (if desired) and pouring to cast the gel.
6. For optimal results, it is highly recommended to keep the gels at +4°C for at least 1 hour before running the gel.

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