LSC in Practice
Dissolving Agarose Gels

Problem
A researcher had been trying to use PerkinElmer’s Soluene®-350 (part number 6003038) to digest agarose gels.

Discussion
Although Soluene-350 has an excellent capacity for the solubilization of wet tissue, aqueous tissue homogenates, proteins, nucleotides and high water content biological samples, it cannot dissolve agarose gels.

However, our journals did provide us with an alternate method that has proven reliable in many laboratories.

It should be noted that techniques utilizing digestion or solubilization do not allow recovery of the original sample.

Recommendation
We recommend the following procedure for reliable sample preparation and counting of agarose gels:

1. Place a section of agarose gel in a 20 mL glass vial.
2. Add 1 mL of sodium hypochlorite solution*.
3. Incubate for 45 minutes at 65 °C to dissolve completely.
4. Allow to cool to room temperature.
5. Add 10 mL of PerkinElmer’s Hionic-Fluor™ (part number 6013319).

* The sodium hypochlorite solution is an aqueous solution containing about 15% active material (about 5% to 6% available chlorine). This is available from any laboratory chemicals supplier.