

# TopVision Agarose Tablets

Catalog Number R2801, R2802

Pub. No. MAN0012975 Rev. B.00



**WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Sheets (SDSs) are available from [thermofisher.com/support](https://www.thermofisher.com/support).

## Contents and storage

Cat. No.	Contents	Amount	Storage
R2801	TopVision Agarose Tablets	0.5 g x 200 tab	room temperature, away from light and moisture
R2802		0.5 g x 1000 tab	

## Description

TopVision Agarose Tablets is a low-electro endosmosis, multi-purpose agarose in tablet form, delivered in a convenient blister pack. It is made of standard melting point agarose, which yields high resolution sharp DNA bands with high clarity and low background. Its optimized gel strength enhances ease of gel processing and handling. Unlike traditional agarose powder that relies heavily on the use of toxic organic solvents, TopVision Agarose Tablets are manufactured using an innovative Organic Solvent-Free Manufacturing process that is more environmentally friendly.

## Specifications

CAS	9012-36-6
Appearance	White to off-white powder
EEO (electroendosmosis)	≤ 0.13
Gelling Point	36 °C ± 1.5 °C (1.5 % gel)
Melting Point	88 °C ± 1.5 °C (1.5 % gel)
Solubility	Clear colorless solution at 1 g in 100 mL water
Moisture	≤ 10 %
Gel Strength	≥ 1200 g/cm <sup>2</sup> (1 % Gel)
Sulfate	≤ 0.15 %
Ash	≤ 0.5 %
Impurities (such as DNase, RNase, Protease, and Endonuclease)	None

## Protocol

1. Add appropriate number of agarose tablets to the electrophoresis buffer based on the table below to prepare your desired gel percentage.

**Note:** Use a flask that is 2 to 4 times the volume of the solution being prepared.

Gel %	1 tablet	2 tablets	3 tablets
1 %	50 mL	100 mL	150 mL
1.2 %	42 mL	83 mL	125 mL
1.3 %	38 mL	77 mL	115 mL
1.5 %	33 mL	67 mL	100 mL
1.8 %	28 mL	56 mL	83 mL
2 %	25 mL	50 mL	75 mL

2. Before heating soak tablets in a buffer (~ 4 minutes) until tablets completely break into fine-particle slurry. Swirl the slurry to break up any remaining particles.

**Important:** Ensure tablets break up entirely. Heating will render non-dispersed agarose particles insoluble.

3. Heat the slurry in a microwave on high power setting until it starts to boil, allow boiling for ~ 30 seconds.
4. Note: Heating times are dependent on the volume of liquid and number of gel tablets to dissolve.
5. Remove the flask from microwave, swirl gently to dissolve any remaining agarose particles.
6. Reheat on high power for 1-2 minutes or until the solution is clear and all particles are dissolved.
7. Remove the flask from the microwave oven, and gently swirl.
8. Cool the solution to approximately 60 °C.
9. Pour the gel.

### If a boiling water bath is used:

To melt agarose, simply heat the slurry in a boiling water bath. Bring the solution to a boil and allow it to boil for 5-10 minutes stirring continuously until agarose dissolves completely.

**Note:** Use caution when handling as solution may be extremely hot.

### Recommended agarose percentage for DNA separation

Agarose concentration	0.3 %	0.6 %	0.7 %	0.9 %	1.2 %	1.5 %	2.0 %
DNA size range (kb)	5-60	1-20	0.8-10	0.5-7	0.4-6	0.2-4	0.1-3

## Limited product warranty

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