media bros

SILICA GEL 60A

STANDARD OPERATING PROCEDURE (SOP)

Silica Gel 60A is ideal for normal-phase chromatography solvent mixtures and DIY column chromatography. It's also recommended for in-line hydrocarbon CRC applications, using a small plug of Silica Gel 60A at 1–10% m/m of the estimated extract in solution.

SAFETY: **Please adhere to the safety and handling instructions in the Silica Gel 60A Safety Data Sheet (SDS), included with your shipment, available at mediabros.store, or by emailing sales@mediabros.store.**

REQUIRED MATERIALS:

- **SILICA GEL 60A FILTRATION MEDIA**
- **IN-LINE FILTRATION HOUSING & FILTER OR CHROMATOGRAPHY COLUMN**
  - **CRC COLUMN SIZE:** For best results, use a 4-6 inch diameter column.
  - **FILTER:** Optimized for use with a ≤5-micron screen filter followed by a 0.2-micron, Media Bros Ulti-Filter.

RECOMMENDED CONDITIONS:

SOLVENT-TO-BIOMASS RATIO: 6:1 to 10:1
OPERATING TEMPERATURE: Below -10°C, will not clog due to ice
FLOW RATE: < 1GPM. A needle valve or flow restrictor at the column base improves flow control.

PROCEDURE:

1. **DETERMINE YOUR RATIO.** For every pound of biomass, load 150-250 grams of Silica Gel 60A into the filtration housing. The exact amount depends on the quality of the biomass and the desired outcome. Refer to our quick reference table to determine the recommended ratio:

Silica Gel 60A (Media Use Based on Grade)			
Plant Matter	Low Grade	Medium Grade	High Grade
1 lb	250g	200g	150g
2 lbs	500g	400g	300g
5 lbs	1,250g	1,000g	750g
10 lbs	2,500g	2,000g	1,500g
15 lbs	3,750g	3,000g	2,250g
20 lbs	5,000g	4,000g	3,000g
25 lbs	6,250g	5,000g	3,750g
30 lbs	7,500g	6,000g	4,500g
50 lbs	12,500g	10,000g	7,500g
100 lbs	25,000g	20,000g	15,000g

2. **SECURE FILTER SCREEN AND MEDIA.** Ensure the filter screen is safely installed. A cloth or paper filter may be combined with a screen or plate. Load media directly into the column, on top of the filter screen.
3. **PRE-WETTING REQUIRED FOR USE WITH CHROMATOGRAPHY APPLICATIONS.** Silica Gel 60A is designed to be used dry except for use in chromatography applications.
4. **RUN EXTRACTION USING A HYDROCARBON-BASED SOLVENT OR CHROMATOGRAPHY MOBILE PHASE SOLVENT COMBINATION.** Avoid saturation and maintain flow. Any lost yield can be recovered by flushing the media with pure solvent.
5. **DISPOSAL.** Follow all SDS instructions for safe disposal.

QUESTIONS? Contact sales@mediabros.store for more information.