

SepaFlash® TLC Plates

SepaFlash® TLC plates are made of high-quality media, which exactly matches the packing material used in SepaFlash® flash columns. This combination provides the user with confidence and increased reproducibility in method development. The plates are coated by advanced instruments, offering highly increased sensitivity and faster analysis.



Silica Particle Size	6-10 µm
Layer Thickness	200 µm
pH Value	6.2-6.8
Adhesion Strength	Can mark with pencil and cut with glass cutter.
Anti-interference Ability	Resistance to concentrated sulfuric acid or potassium permanganate.
Separation Effects	Effective separation of standard three dye mixture.

Notes: Storage of TLC plates must keep away from moisture and pollutants. As preferred, use TLC plates after activation.

Item Number	Description	Units/Box
TL-8103-2101	High performance silica TLC plate, glass backed, F254, 25*80 mm	320
TL-8103-2106	High performance silica TLC plate, glass backed, F254, 200*200 mm	20
TL-8103-2116	High performance silica TLC plate, aluminum sheet, F254, 200*200 mm	20
TL-8601-2101-N	Neutral alumina TLC plate, glass backed, F254, 25*80 mm	320
TL-8601-2106-N	Neutral alumina TLC plate, glass backed, F254, 200*200 mm	20
TL-8601-2101-B	Basic alumina TLC plate, glass backed, F254, 25*80 mm	320
TL-8601-2106-B	Basic alumina TLC plate, glass backed, F254, 200*200 mm	20

Optimizing Flash Chromatography Purification

Thin Layer Chromatography (TLC) is often performed on crude reaction mixtures to determine optimal conditions for purification by flash chromatography.

(1) Solvent Composition Selection and Strength Adjustment

The optimal solvent composition can be achieved by using different binary eluent which may possess same solvent strength but have different R_f value for the same pair of compounds. After the optimal solvent composition was found, the solvent strength had to be optimized. The optimal eluent strength is established by adjusting the different ratio to keep the R_f value in the range of 0.15 to 0.4.

(2) Band Tailing Improvement

The band tailing can be improved by adding more polar solvent into the solvent system or slightly changing the pH of the system, until the spots on the TLC plate become flat shape and no longer strip-shaped.

(3) Column Selection and Loading Capacity

The column selection can be determined by the ratio of R_f value of border upon compounds. Smaller R_f with larger ratio of R_f value means a short column or larger sample size is preferred.