



Top Selling Thin Layer Chromatography Plates

- Silica gel GF - Easy to scrape soft surface
- Silica gel GHLF - Easy to char, water tolerant surface
- Silica gel HLF - Easy to handle hard surface



75 Blue Hen Drive
Newark DE 19713 USA
Ph: 302-737-6960
Fx: 302-737-7115
cs@milesscientific.com
<http://www.milesscientific.com>

Silica Gel G & GF Soft Layer UNIPLATES (Inorganic Binder)

These plates are the most widely used silica gel TLC plates. No organic substances are added to these products, thus making them compatible with sulfuric acid charring visualization.

The "G" stands for Gypsum and indicates that calcium sulfate hemihydrate ($\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$), a refined form of gypsum, has been included in the adsorbent formulation. Gypsum functions as a binder, improving the cohesion of the adsorbent particles and increasing the adhesion of the layer to the glass substrate.

These plates are commonly scraped from the glass backing to isolate separated components for other analytical procedures. They are compatible with all organic solvents, however, they are not recommended for use in systems containing greater than 20% water because of the solubility of the gypsum binder in aqueous solutions (For water tolerance see the GHL & GHLF series of plates).

Cat #	Description	Thickness	Plate size (cm)	UV 254	Plates / Box
P01011	Silica Gel G	250 μm	20x20		25
P02011	Silica Gel GF	250 μm	20x20	Yes	25
P02012	Silica Gel GF	500 μm	20x20	Yes	25
P02013	Silica Gel GF	1000 μm	20x20	Yes	25
P02015	Silica Gel GF	2000 μm	20x20	Yes	25

Silica Gel GHL & GHLF Hard Layer UNIPLATES (Inorganic Binder)

These plates are 100% H₂O resistant and are compatible with aqueous developing solvents. They are less rugged than the plates with organic binder (HL & HLF) but still provide improved handling and sample application compared to Silica Gel G & GF UNIPLATES and are tough enough to write on with a soft pencil, if required.

These hard layer UNIPLATES with inorganic binder are recommended for all applications including those where visualization occurs through strong charring procedures or in any case in which reagent interaction with an organic binder occurs.

Cat #	Description	Thickness	Plate size (cm)	Score Size (cm)	UV 254	Plates / Box
P11011	Silica Gel GHL	250 μm	20x20			25
P11521	Silica Gel GHL	250 μm	10x20	2.5 x 10		25
P21011	Silica Gel GHLF	250 μm	20x20		Yes	25
P21521	Silica Gel GHLF	250 μm	20x20	2.5 x 10	Yes	25

Silica Gel HL & HLF Hard Layer UNIPLATES (Organic Binder)

These are the most rugged silica gel plates available. They not only ease handling and sample application, but also permit the use of up to 80% water in the developing solvent without loss of adherence of the adsorbent layer to the glass plate. Organic binder plates are recommended for all TLC applications except those that use vigorous charring for visualization. Virtually all other visualization methods are free from interference from the organic binder.

These plates use high performance silica gel with small average diameter and narrow particle size distribution resulting in separations 25% to 30% faster than with most other TLC plates. Separated spots are more compact and better resolved, which allows visualization at lower sample levels. The enhanced abrasion resistance means easier handling and sample application.

Cat #	Description	Thickness	Plate size (cm)	Score Size (cm)	UV 254	Plates / Box
P46011	Silica Gel HL	250 μm	20x20			25
P46521	Silica Gel HL	250 μm	10x20	2.5 x 10		25
P47011	Silica Gel HLF	250 μm	20x20		Yes	25
P47521	Silica Gel HLF	250 μm	20x20	2.5 x 10	Yes	25