

CN-, Diol- and NH₂-modified plates (TLC and HPTLC)

For special separation problems

CN-, Diol- and NH₂-modified silica sorbents are less polar than the classical silica phases and therefore well suited for separation of hydrophilic or charged substances.

The CN-modified plate is based on a silica gel 60 modified with a cyanopropyl group while the diol-modified plate utilizes a silica surface modified by a vicinal diol alkyl ether. These moderately polar plates with their intermediate properties fill a gap in the range of the silica plates allowing use in both normal phase and reversed phase systems. Due to their special features, all kinds of solvent systems can be used.

Especially the dual personality of the silica-CN plate allows unique two-dimensional separations to be achieved by using the normal phase mechanism in the first direction followed by the reversed phase mechanism in the second direction.

The amino-modified silica NH₂ plates provide weak basic ion exchange characteristics. These unique features enable the separation of charged compounds such as nucleotides, purines, pyrimidines, phenols and sulfonic acids using simple eluent mixtures. In addition, NH₂ modified silica plates allow for reagent-free detection of certain chemical substances by thermochemical fluorescence activation.

Because most substance separated on these modified plates are colorless, our modified plates contain the blue fluorescing, acid stable UV indicator F_{254s}. Samples which absorb short-wave UV at 254 nm are detected due to fluorescence quenching.

Ordering information – TLC modified silica gel 60, aluminium backed

Product	Ordering No.	Format [cm]	Contents of one package
Silica gel 60 NH ₂ F _{254s}	1.05533.0001	20 x 20	20 sheets

F_{254s}: Blue fluorescent indicator

Ordering information – TLC modified silica gel 60, glass backed

Product	Ordering No.	Format [cm]	Contents of one package
HPTLC silica gel 60 CN F _{254s}	1.16464.0001	10 x 10	25 plates
HPTLC silica gel 60 Diol F _{254s}	1.12668.0001	10 x 10	25 plates
HPTLC silica gel 60 Diol F _{254s}	1.05636.0001	20 x 10	25 plates
HPTLC silica gel 60 NH ₂	1.12572.0001	20 x 10	25 plates
HPTLC silica gel 60 NH ₂ F _{254s}	1.13192.0001	20 x 10	25 plates
HPTLC silica gel 60 NH ₂ F _{254s}	1.15647.0001	10 x 10	25 plates

Layer thickness: 200 µm | F_{254s}: Blue fluorescent indicator

► **Classical silica TLC plates (TLC)** For versatile and reliable routine analysis of a broad range of substances
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► **High performance silica plates (HPTLC)** For fast analysis of complex samples for manual or instrumental use
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