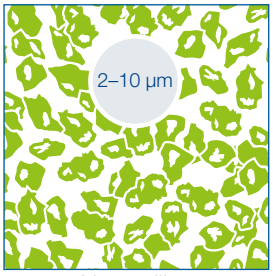
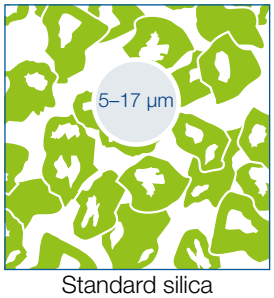
Sharper separation by nano silica

Nano silica for HPTLC

- Narrow fractionation of the silica particles allows theoretical plate heights, which are one order of magnitude smaller than on standard silica layers.



Nano silica



Standard silica

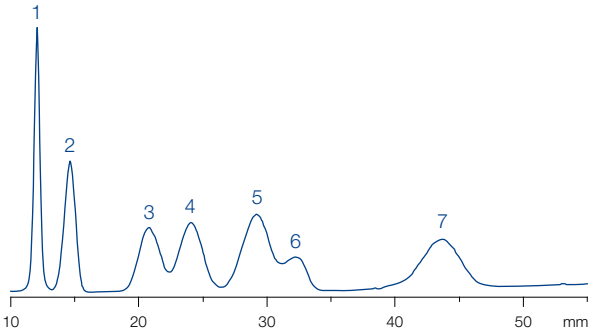
Advantages

- Shorter migration distances
- Lower amount of samples required
- Increased detection sensitivity with equal selectivity
- Less developing time

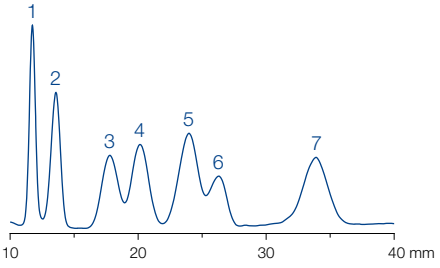
Comparison of ADAMANT and Nano-ADAMANT plates for separation of anthraquinone dyes

Layers:	A) ADAMANT
	B) Nano-ADAMANT
Sample:	1 µL, about 0.1 %
Eluent:	toluene – cyclohexane (4:3, v/v)
Migration time:	A) 30 min, B) 15 min

Peaks:
1. Blue 3
2. Violet 2
3. Red
4. Green
5. Blue 1
6. Greenish blue
7. Violet 1



A)



B)

Nano-ADAMANT G unmodified HPTLC silica layers

Key features

- Outstanding hardness and abrasion resistance due to an optimized binder system
- Increased separation efficiency due to an optimized particle size distribution
- High suitability for trace analyses resulting from a UV indicator with increased brilliance and a lownoise background of the layer

Technical characteristics

- Nano silica 60, mean pore size 60 Å, specific surface (BET) ~ 500 m^2/g, specific pore volume 0.75 mL/g, particle size 2–10 µm

Ordering information

Plate size [cm]	10 x 10	10 x 20	Thickness of layer	Fluorescent indicator
Pack of [plates]	25	50		
Glass plates				
Nano-ADAMANT	821140	821150	0.20 mm	–
Nano-ADAMANT UV_{254}	821110	821120	0.20 mm	UV_{254}

Nano-SIL G Ax A unmodified HPTLC silica layers

Technical characteristics

- Nano silica 60, mean pore size 60 Å, specific surface (BET) ~ 500 m^2/g, specific pore volume 0.75 mL/g, particle size 2–10 µm
- Indicator: manganese activated zinc silicate with green fluorescence for short-wave UV (254 nm)
- Binder: highly polymeric product, which is stable in almost all organic solvents and resistant towards aggressive visualization reagents

Ordering information

Plate size [cm]	5 x 5	5 x 20	10 x 10	10 x 20	20 x 20	Thickness of layer	Fluorescent indicator
Pack of [plates]	100	50	25	50	25		
Glass plates							
Nano-SIL-20	811011		811012	811013		0.20 mm	–
Nano-SIL-20 UV_{254}	811021		811022	811023		0.20 mm	UV_{254}
ALUGRAM® Xtra aluminum sheets							
Nano-SIL G		818240			818241	0.20 mm	–
Nano-SIL G/UV_{254}		818342			818343	0.20 mm	UV_{254}
ALUGRAM® aluminum sheets							
Nano-SIL G					818141	0.20 mm	–
Nano-SIL G/UV_{254}					818143	0.20 mm	UV_{254}

Unmodified HPTLC silica layers

Nano-DURASIL G unmodified HPTLC silica layers

Technical characteristics

- Nano silica 60, mean pore size 60 Å, specific surface (BET) ~ 500 m^2/g, specific pore volume 0.75 mL/g, particle size 2–10 µm
- Indicator: manganese activated zinc silicate with green fluorescence for short-wave UV (254 nm)
- Hard, water-resistant and wettable layers due to a special binder system
- Different selectivity compared to ADAMANT and SIL-G plates no reversed phase tendency, more polar than Nano-SIL

Ordering information

Plate size [cm] Pack of [plates]	10 x 10 25	10 x 20 50	Thickness of layer	Fluorescent indicator
Glass plates				
Nano-DURASIL-20	812010	812011	0.20 mm	–
Nano-DURASIL-20 UV_{254}	812013	812014	0.20 mm	UV_{254}

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More information from page 9 onwards as well as online at *www.mn-net.com/chroma*