



## CHIRALPLATE <sup>G</sup> special layer enantiomer separation

### Technical characteristics

- Reversed phase nano silica impregnated with Cu<sup>2+</sup> ions and a chiral selector (proline derivative)
- Separation based on ligand exchange, i.e. formation of ternary mixed-ligand complexes with the Cu(II) ions, differences in the stability of the diastereomeric complexes cause chromatographic separation

### Recommended application

- Enantiomer separation of amino acids, *N*-methylamino acids, *N*-formylamino acids,  $\alpha$ -alkylamino acids, thiazolidine derivatives, dipeptides, lactones,  $\alpha$ -hydroxycarboxylic acids

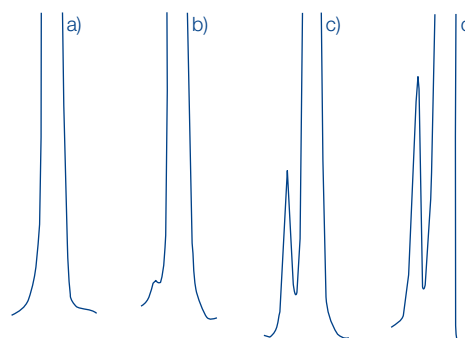
### Enantiomer separation of amino acids

MN Appl. No. 400520

Quantitative determination (remission location curves) of TLC-separated enantiomers of *tert.*-leucine:

Layer: CHIRALPLATE  
 Eluent: methanol – water (10:80, v/v)  
 Detection: dip in 0.3 % ninhydrin solution  
 quantification with scanner, 520 nm

- a) L-*tert.*-leucine  
 b) L-*tert.*-leucine + 0.1 % D-*tert.*-leucine  
 c) L-*tert.*-leucine + 1 % D-*tert.*-leucine  
 d) external reference sample



### Ordering information

Plate size [cm]	5 x 20	10 x 10	10 x 20	20 x 20	Thickness of layer	Fluorescent indicator
<b>Glass plates</b>						
Pack of [plates]	4					
CHIRALPLATE			811056		0.25 mm	UV <sub>254</sub>
Pack of [plates]	50	25	25	25		
CHIRALPLATE	811057	811059	811055	811058	0.25 mm	UV <sub>254</sub>

## SIL N-HR <sup>P</sup> unmodified standard silica layers

### Technical characteristics

- High purity silica 60, mean pore size 60 Å, specific surface (BET) ~ 500 m<sup>2</sup>/g, specific pore volume 0.75 mL/g, particle size 5–17 μm, different binder system compared to SIL G results in different separation characteristics
- A special feature of the POLYGRAM<sup>®</sup> SIL N-HR is a higher gypsum content

### Ordering information

Plate size [cm]	5 x 20	20 x 20	Thickness of layer	Fluorescent indicator
Pack of [plates]	50	25		
<b>POLYGRAM<sup>®</sup> polyester sheets</b>				
SIL N-HR/UV <sub>254</sub>	804022	804023	0.20 mm	UV <sub>254</sub>

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