

# CHROMABOND® XTR

## Kieselguhr phase for liquid-liquid extraction

### Features

- Base material coarse-grained kieselguhr (also known as diatomaceous earth, hydromatrix, celite)  
large pore size, high pore volume, constantly high batch-to-batch quality  
pH working range 1–13
- Application:**  
Liquid-liquid extraction of highly viscous aqueous solutions such as physiological fluids (blood, plasma, and serum) in clinical chemistry, dyes in textiles, environmental and food analysis without use of a separation funnel  
High water loadability without breakthrough of water during elution with organic solvents  
Also suited for removing small amounts of water from solvents which are not miscible with water
- Advantages:**  
fast, reproducible and economical  
simultaneous preparation of several samples  
no problems with phase separation · no formation of emulsions  
high recovery rates  
saving of time and solvents  
organic solutions need not to be dried after separation



### General column parameters

CHROMABOND® XTR volume	amount of adsorbent	max. volume capacity of aq. solution	waiting period before elution	elution volume
1 mL	250 mg	0.25 mL	5 min	3 mL
3 mL	500 mg	0.5 mL	5 min	6 mL
6 mL	1 g	1 mL	5–10 min	8 mL
15 mL	3 g	3 mL	5–10 min	12 mL
30 mL	4.5 g	5 mL	5–10 min	16 mL
45 mL	8.3 g	10 mL	10–15 min	24 mL
70 mL	14.5 g	20 mL	10–15 min	40 mL
150 mL	37.5 g	50 mL	10–15 min	90 mL

### Solvents applicable for elution

diethyl ether  
*tert*-butyl methyl ether  
ethyl acetate  
*n*-hexane  
cyclohexane  
toluene  
dichloromethane (methylene chloride)  
trichloromethane (chloroform)

**solvent mixtures:**  
trichloromethane – methanol (90:10, v/v)  
trichloromethane – methanol (85:15, v/v)  
diethyl ether – ethanol (90:10, v/v)  
diethyl ether – ethanol (80:20, v/v)  
dichloromethane – 2-propanol (90:10, v/v)  
dichloromethane – 2-propanol (85:15, v/v)

Eluents with too high alcohol contents

Depending on the concentration of the analytes eluates can be analyzed immediately, or the organic solvent is evaporated. The pH value of the aqueous solution can be altered on the column, which enables elution of different compounds of a sample under optimized conditions. Under certain circumstances, acidic, neutral, and basic compounds can be fractionated in this way.

cause an increase in volume of the aqueous phase on the CHROMABOND® XTR. Here the column could be overloaded and the aqueous phase displaced from the column. In this case, a greater capacity column should be used.

### Ordering information

Column volume	1 mL	3 mL	6 mL	15 mL	30 mL	45 mL	70 mL	150 mL
Adsorbent weight	250 mg	500 mg	1 g	3 g	4.5 g	8.3 g	14.5 g	37.5 g
Pack of	100	50	30	30	30	30	30	10

#### CHROMABOND® XTR polypropylene columns

730501 730502 730487 730489 730505 730506 730507 730509

#### CHROMABOND® XTR polypropylene columns · BigPacks

730487.250 (pack of 250) 730507.100 (pack of 100)

#### CHROMABOND® MULTI 96 XTR

96er plates 96 x 150 mg, packs of 1 plate, for max. 96 x 0.2 mL aqueous solution

738131.150M

#### CHROMABOND® XTR adsorbent

50 bags of 14.5 g (for max. 20 mL aqueous solution each)

for 70 mL PP columns with 100 PE filter elements 730585  
for NT20 with 50 PE filter elements (dia. 10 mm) 730586

500 g 730595.500  
1 kg 730595.1000  
5 kg 730595.5000