

## **BUCHI** Mind your Media

Stationary Phase Selection for Flash, Prep HPLC, or SFC



## Choosing a phase

Ideal separation occurs when the polarity of the stationary phase and target compounds are matched.



| Phase                                   | Target Compound Polarity | Typical Use  |
|---|--------------------------|--|
| Silica                                  | High & Medium            | Typical normal phase LC polar phase<br>Achiral SFC |
| Amino                                   | High & Medium            | Carbohydrates & Amines<br>Achiral SFC              |
| Diol                                    | Medium & Low             | Lipids   |
| C18                                     | Low & Nonpolar           | Typical reversed phase nonpolar phase              |
| C18 AQ                                  | Low & Nonpolar           | Use with a majority aqueous mobile phase system    |
| C18 WP / C4 WP                          | Low & Nonpolar           | Wide pore option<br>Proteins & Peptides            |
| Immobilized / Coated<br>Polysaccharides |                          | Chiral/SFC   |
| Brush Type                              |                          | Chiral/SFC   |

## Fine-tune your selection

Optimize your separation and throughput by selecting the best method and cartridge parameters for your application.

|                  | Flash           | Prep HPLC    | SFC             |
|------------------|-----------------|--------------|-----------------|
| Particle Size    | 15 - 63 um      | 5 - 15 um    | 5 - 15 um       |
| Column ID        | 12 - 115 mm     | 10 - 70 mm   | 4.6 - 50 um     |
| Flow Rate        | 15 - 250 mL/min | 5-100 mL/min | 50 - 660 mL/min |
| Loading Capacity | < 300 g         | < 1g         | < 1g            |
| Max Pressure     | 50 bar          | 300 bar      | 400 bar         |
| Productivity     | High            | Low          | Highest*        |

\*Due to a combination of high flow rates, high separation efficiency, and multiple injection possibility

## Find more resources at www.buchi.com