

#### SWEDISH EXCELLENCE IN NANOPOROUS SILICA



Nanologica is a Swedish company with expertise in materials technology. Its unique nanoporous silica technology is currently used world-wide for clinical and chromatography applications.

# CHROMATOGRAPHY



- HIGH RESOLUTION
- LONG COLUMN LIFE CYCLE
- ULTRA PURE BDS

Phase	Particle Size	Pore Size	Surface Area	Carbon Load
C18	2.6, 3.5, 5 μm	110 Å	300 m²/g	19 %
C8	2.6, 3.5, 5 μm	110 Å	300 m²/g	11 %
C4	2.6, 3.5, 5 μm	110 Å	300 m²/g	7 %
PhenylHexyl	2.6, 3.5, 5 μm	110 Å	300 m²/g	16 %
PFP	2.6, 3.5, 5 μm	110 Å	300 m²/g	11 %
Cyano	2.6, 3.5, 5 μm	110 Å	300 m²/g	7 %

Nanologica's expertise in materials technology has resulted in its proprietary technology -NLAB Saga<sup>™</sup> which is a high quality nanoporous silica media well-adapted for chromatography. The highly porous silica particles are used in analytical columns and for bulk applications in manufacturing. The silica has unique properties such as sharp pore and particle size distributions, resulting in low back pressures and very high plate numbers. Proprietary manufacturing process developed in-house gives the silica extreme chemical and physical stability. Furthermore, Nanologica's surface chemistry gives excellent selectivity across a wide range of application needs, especially in separation of basic molecules making NLAB Saga<sup>™</sup> the choice of matrix for extremely challenging running conditions.

NLAB Saga<sup>™</sup> is available in particle sizes ranging from sub 2um to 13 um diameters, with various function-alized chemistries. A broad selection of (U)HPLC col-umns are available under the SVEA<sup>™</sup> product range.

SVEA<sup>™</sup> columns meet the demands of performance, precision and long life cycles, delivering outstanding results to the end-user.



### **COLUMN LIFE CYCLE**

### Stability in low and high pH SVEA C18 Gold $5\mu m$ 100x4.6 mm



#### BASICCONDITIONS



Time (min)

Chemistry	C18	C8	C4
pH Range	1-10	1-9	1-8
Temperature Limits	Low pH = 60 °C High pH = 40 °C	Low pH = 50 °C High pH = 40 °C	Low pH = 40 °C High pH = 40 °C



## DRUG DELIVERY

Nanologica has developed a nanoporous silica, NLAB Silica<sup>™</sup>, for improved delivery of active pharmaceutical ingredients (APIs). By use of extensive knowledge of interactions between APIs and the materials available from the NLAB Silica<sup>™</sup> portfolio, new pharmaceutical formulations have been developed to for example yield dramatic improvement in solubility. Nanologica conducts fee-for-service feasibility studies for pharmaceutical companies. Successful formulations are then developed in partnership under a commercial agreement.



Nanologica is also applying its Drug Delivery technology to develop therapeutic products for unmet medical needs and high commercial value. Internal projects are conducted with a network of scientific collaborators, medical advisors and long-term partnerships with other technology and/or pharmaceutical companies to combine expertise ultimately resulting in a beneficial solution to patients.

NLAB SilicaTM has shown strong potential for tackling one of the most pressing global issues - multi-resistant bacteria. Nanologica has successfully developed new formulations of marketed anti-infectives to overcome complications and limitations of these drugs. Reformulation of pharmaceutical drugs using NLAB SilicaTM also offers an effective route to provide better oral treatment in combating other infectious diseases, such as antibiotic-resistant tuberculosis or HIV.

## CONTACT DETAILS AND ORDER INFORMATION

Nanologica AB Forskargatan 20G SE-151 38 SÖDERTÄLJE Sweden

+ 46 8 410 749 49 info@nanologica.com www.nanologica.com

