



**ZEOCHEM®**



# CHROMATOGRAPHY SILICA GELS

**High Performance Chromatography Gels**

**Manufactured with Swiss Accuracy and  
Consistency**

**R&D to Pilot to Process Scale**

---

Chemistry. Pure. Efficient.

---

# ZEOCHEM

ZEOCHEM is a premier global manufacturer of Chromatographic Silica. With roots in Switzerland, we have a rich culture of environmental sustainability, customer service and quality products. For over 50 years, ZEOCHEM has been a trusted supplier and our customers can rely on us to provide the technical and service solutions they need.



## Performance

Due to our consistently high-quality products and excellent batch to batch reproducibility, ZEOCHEM chromatography silica gel has been used for decades in a wide variety of industries, including pharmaceuticals, nutraceuticals, natural products, biopharmaceuticals, cosmetics, fine chemicals, food and beverages.

ZEOCHEM silica gels can be relied on to ensure your purification processes deliver high yields and purity each time, every time.

**C o n s i s t e n t .**  
**R e p r o d u c i b l e .**  
**E f f e c t i v e .**

*When it comes to meeting the best productivity and performance requirements, you can depend on our consistent, high quality silica gel products and personalized service.*

# Why ZEOCHEM – Our Commitment



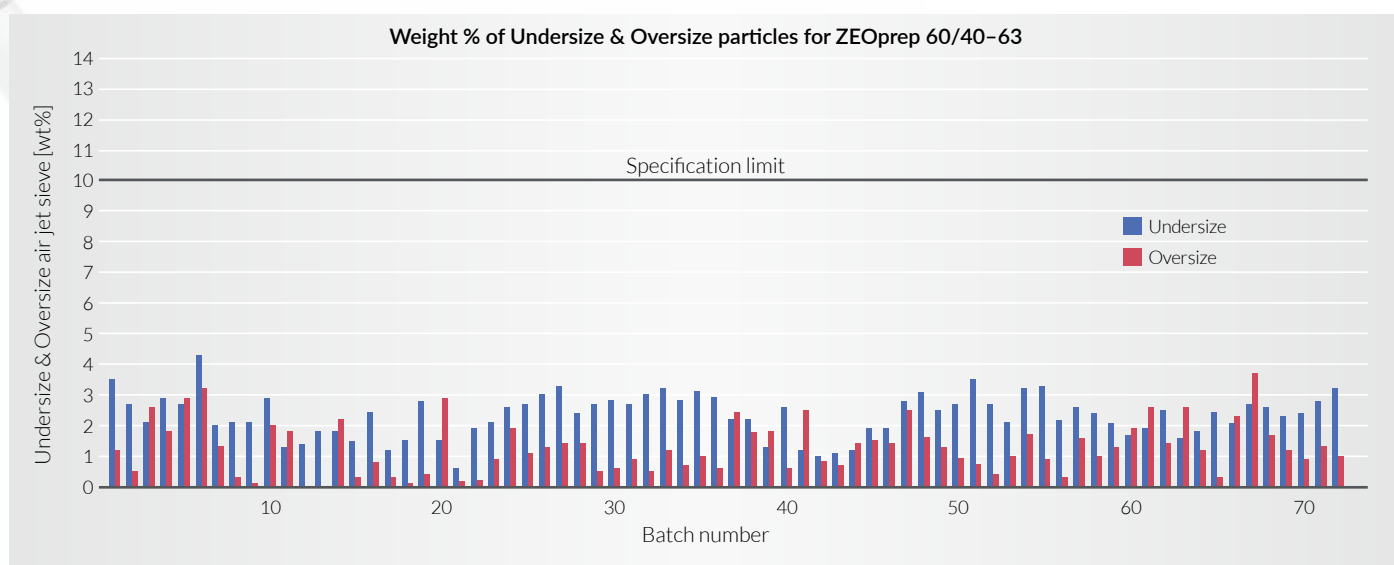
Our new state of the art production facility has hundreds of tons of capacity and further expansion possibilities, which means our customers can be secure in the knowledge of our long term supply capabilities.

- Opened in 2018
- Swiss production knowhow
- Multiple production lines
- Reliable European supply chain



A highly qualified R&D team based in our Swiss Centre of Excellence is on hand to support technical needs, including customer solutions for difficult separations or purifications, and process optimisations.

- State of the art R&D facility
- Material development
- Application development support
- R&D silica and derivatization chemistry capabilities



All our plants are ISO certified and due to our continuous improvement programs, we ensure our production processes conform to best practices and our products meet the newest regulatory requirements.

- Quality Assurance ISO 9001:2015 and ISO 14001
- Fully equipped QC laboratory
- Focus on batch to batch reproducibility



# Gels

under very tight controls. The high mechanical stability and separations. Many surface modification options.

separations. ZEOprep™ silica is particle sizes, plus the option of process requirements.

All ZEOCHEM silica gels come in a wide variety of morphologies and with many surface modification options. ZEOCHEM also offers the possibility to customize material on request.



Granular silica for prep, flash and process separations. ZEOprep™ silica is available with a wide variety of pore and particle sizes, plus the option of four different moisture contents to fit any process requirements.



ZEObeads™ spheroidal silica for superior separation performance  
generally used in medium to high chromatographic pressure systems.



ZEOsphere™ functionalised spherical silica for high pressure, high resolution preparative to process scale purifications

Typical Applications	Silica morphology	Pore size Å	MW (D)	Particle size (µm)	Separation efficiency
API Intermediates Small Molecules Natural Products Food Flavors Fragrances Lipids/oils/fats Carbohydrates Pigments Cosmetics Biomolecules Peptides Insulin Analogues Oligonucleotides Proteins Heavy metal scavengers	<b>Irregular (ZEOprep)*</b>	60         90	<500   <10,000  10,000	25 – 40 35 – 70 40 – 63 60 – 200 75 – 315 200 – 500	
	<b>Spheroidal (ZEObeads)</b>	50, 100	300 – 800	20 – 30	
	<b>Spherical (ZEOSphere)</b>	100 120 300	7,000  < 30,000	10 15 15+	

**Surface modification/functionality**

Acqueous	Non Acqueous	Retention of polar analytes
C4 Phenyl C8 C18	SiO2 Cyano* Diol* NH2* NH2P SAX	

**Thiol (SH) & NH2** phases available for scavenging electrophiles and toxic heavy metals

\* Can be used in both NP & RP systems

Please note: the optimal chromatographic material is specific to each analyte and chromatographic system. The above information is based on general chromatographic principles and is intended to be used as a guide only. Some limitations apply to the above listed grades/functional groups.

Typical Applications	Silica morphology	Pore size Å	MW (D)	Particle size (µm)	Separation efficiency
API Intermediates Small Molecules Natural Products Food Flavors Fragrances Lipids/oils/fats Carbohydrates Pigments Cosmetics Biomolecules Peptides Insulin Analogues Oligonucleotides Proteins Heavy metal scavengers	<b>Irregular (ZEOprep)*</b>	60         90	<500   <10,000  10,000	25 – 40 35 – 70 40 – 63 60 – 200 75 – 315 200 – 500	
	<b>Spheroidal (ZEObeads)</b>	50, 100	300 – 800	20 – 30	
	<b>Spherical (ZEOSphere)</b>	100  120  300	7,000   < 30,000	10  15  15+	

**Surface modification/functionality**

Acqueous	Non Acqueous	Retention of polar analytes
C4 Phenyl C8 C18	SiO2 Cyano* Diol* NH2* NH2P SAX	

**Thiol (SH) & NH2** phases available for scavenging electrophiles and toxic heavy metals

\* Can be used in both NP & RP systems

Please note: the optimal chromatographic material is specific to each analyte and chromatographic system. The above information is based on general chromatographic principles and is intended to be used as a guide only. Some limitations apply to the above listed grades/functional groups.

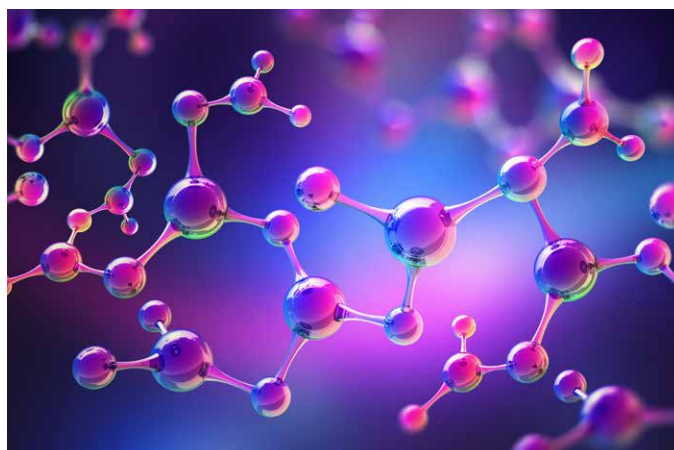


# Chromatography Gels – Application Areas

Excellent reproducibility makes ZEOCHEM silica gels one of the most reliable Chromatographic material for R&D, Pilot and Process Scale purifications for a variety of application areas.

For example, for decades, ZEOprep silica gels have been used for decades at Industrial Scale in various industries, such as the purification of polyunsaturated fatty acids, which are widely used throughout the Nutraceutical and Pharmaceutical Industries. ZEOCHEM silica gels also exhibit extraordinary performance in purification of naturally occurring APIs such as Paxlitaxel & Docetaxel and many more.

Our R&D team is always happy to work with customers on custom materials for specific applications.

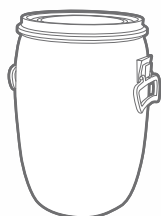
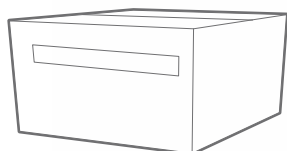
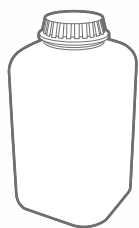


## Applications

- API Purification
- Biopharmaceutical
- Cosmetics
- Health Science Diagnostics
- Analytical Laboratories
- Natural Products
- Environmental
- Food & Beverage
- Fine Chemicals
- Diagnostic Kits

# ZEOCHEM Chromatography Gels – Analytical to Process Scale

Strict quality controls from raw material to finished product ensure highest quality silica gel that results in very consistent and reliable chromatographic separations.



## At a glance – Your advantages

- Batch to Batch Reproducibility
- Wide Range of Selectivity Options
- Range of Moisture Contents
- Chemical and Mechanical Stability
- Loading Capacity
- Large Scale Batches (kg to multi-ton)
- Narrow Particle Size Distribution
- Unsurpassed Service & Support
- Swiss Dependability
- Innovation through R&D

All our ZEOCHEM silica gels are available globally. Please contact us for your closest point of supply. We are happy to meet your project requirements and to outline your needs.

# ZEOCHEM®

| cph |

**ZEOCHEM AG**  
Joweid 5  
CH-8630 Rüti  
Switzerland  
+41 44 922 93 93

**ZEOCHEM LLC**  
PO Box 3082  
Louisville, KY 40201  
USA  
+1 502 634 7600

**Jiangsu ZEOCHEM Technology Co. Ltd**  
Shanghai Office: RM.711, Metro Building,  
30 Tian Yao Qiao Rd  
Shanghai, China, P.R.C. 200030  
+86 21 3477 0686

**ZEOCHEM Pte Ltd**  
Level 30, Singapore Land  
Tower, 50 Raffles Place  
Singapore 048623  
+65 8128 3555

**ZEOCHEM d.o.o.**  
Karakaj 229a,  
75400 Zvornik  
Bosnia and Herzegovina  
+387 56 490 830