



Complete Guide for HPLC Column



**HYM BROTHERS
ANALYTICAL SOLUTIONS
PVT. LTD.**



**HYM Brothers Analytical Solutions Pvt.
Ltd.**

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ECOSIL High Performance HPLC Column:

Ecosil provide an extensive selection of packed column to address your separation needs. Numerous specially bonded phase are available to solve the most difficult separation problems.

- Ecosil various columns are made by the OEM, the famous column company.
- Ecosil HPLC columns: C18/ C8 /C30 /NH₂ /Phenyl /Silica stationary phase with wide PH range
- Ecosil Column: Raw materials the bonding process and the final solid-phase extraction column packing, all the procedures have been rigorously tested.
- Ecosil offer lower price, better performance
- Polymer matrix with high-purity silica.
- High column efficiency & Reproducibility, Symmetrical Peak separation
- Columns individually tested for quality assurance
- Unique End capping technology
- Globally available with approved distributors /channel partner

PHYSICAL PROPERTIES OF HPLC PACKING MATERIALS

| Sl.No | Product description | Particle size | Aperture | Surface area | pH range | Carbon Load | Particle Shape | End group sealing | USP Listing |
|-------|------------------------|---------------|----------|-----------------------|----------|-------------|----------------|-------------------|-------------|
| 1 | Ecosil C18 | 5µm | 100Å | 450m ² /g | 2~8 | 9.50% | Spherical | Yes | L1 |
| 2 | Ecosil C18-SH | 3,5,10µm | 120Å | 300 m ² /g | 1~10 | 17% | Spherical | Yes | |
| 3 | Ecosil C18-Extend | 3,5µm | 100Å | 300 m ² /g | 1~12 | 21.70% | Spherical | Yes | |
| 4 | Ecosil C18-EPS | 3,5,10µm | 120Å | 300 m ² /g | 1~10 | 18.50% | Spherical | Yes | |
| 5 | Ecosil C18-AQ | 3,5,10µm | 120Å | 300 m ² /g | 1~10 | 14% | Spherical | Yes | |
| 6 | Ecosil C18-AQ PLUS | 3,5µm | 120Å | 300 m ² /g | 1~10 | 17% | Spherical | Yes | |
| 7 | Ecosil Silica | 3,5,10µm | 120Å | 300 m ² /g | 2~8 | NA | Spherical | No | L3 |
| 8 | Ecosil C8 | 5µm | 100Å | 350 m ² /g | 2~8 | 8% | Spherical | Yes | L7 |
| 9 | Ecosil C8-SH | 3,5,10µm | 120Å | 300 m ² /g | 1~10 | 10% | Spherical | Yes | |
| 10 | Ecosil C8-EPS | 3,5µm | 120Å | 300 m ² /g | 1~10 | 12% | Spherical | Yes | |
| 11 | Ecosil NH ₂ | 3,5,10µm | 120Å | 300 m ² /g | 2~8 | 4% | Spherical | No | L8 |
| 12 | Ecosil CN | 3,5,10µm | 120Å | 300 m ² /g | 2~8 | 5% | Spherical | No | L10 |
| 13 | Ecosil Phenyl | 3,5,10µm | 120Å | 300 m ² /g | 2~8 | 9.50% | Spherical | Yes | L11 |
| 14 | Ecosil C1 | 3,5µm | 120Å | 300 m ² /g | 2~8 | 3% | Spherical | No | L13 |
| 15 | Ecosil Diol | 3,5,10µm | 120Å | 300 m ² /g | 2~8 | 4% | Spherical | No | L20 |
| 16 | Ecosil C4 | 3,5,10µm | 120Å | 300 m ² /g | 2~8 | 5.50% | Spherical | No | L26 |
| 17 | Ecosil C30 | 3,5,10µm | 200Å | 200 m ² /g | 2~8 | 20% | Spherical | No | L62 |

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Ecosil C18- AQ/ C18 -AQ PLUS Columns

Product brief:

- Unique bonding technique hydrophilic ODS, 100% compatible with the aqueous phase
- AQ PLUS stable at low pH (pH = 1)

| Sl.No. | Description | Particle size | Guard column | Column Size | |
|--------|--------------------|---------------|-----------------|-------------|-----------|
| 1 | Ecosil C18-AQ | 5µm | ECG-C18-AQ | 4.6×150mm | 4.6×250mm |
| 2 | Ecosil C18-AQ PLUS | 5µm | ECG-C18-AQ PLUS | 4.6×150mm | 4.6×250mm |

Ecosil C18/C8 HPLC Columns

Product brief:

- Stronger reservations for polar substances
- C18 : Amidohexadecylsilyl silica gel
- Greatly improved the adsorption and tailing of basic compounds, excellent peak shape
- Carbon chain bonded polar group, the group is formed in a layer of "shield" water, which can be used 100% water as the mobile phase

| Sl.No. | Description | Particle size | Guard column | Column Size | |
|--------|----------------|---------------|--------------|-------------|-----------|
| 1 | Ecosil C18-EPS | 5µm | ECG-C18-EPS | 4.6×150mm | 4.6×250mm |
| 2 | Ecosil C8-EPS | 5µm | ECG-C8-EPS | 4.6×150mm | 4.6×250mm |

Ecosil C18-extend columns

Product brief:

- Ecosil C18-extend columns :
- Wide pH range (pH 1-12)
- High column efficiency
- Polymer matrix with high-purity silica (Hybrid Column)

| Sl.No. | Description | Particle size | Guard column | Column Size | |
|--------|-------------------|---------------|----------------|-------------|-----------|
| 1 | Ecosil C18-Extend | 5µm | ECG-C18-Extend | 4.6×150mm | 4.6×250mm |

Ecosil C18/C8 columns detailed description:

- **Characteristics of Ecosil C18 Reversed-phase columns:**

1. High column efficiency, good separation and low column pressure.
2. Low carbon load and good for HPLC separations of hydrophilic compounds with 100% water mobile phase.
3. With High-purity silica and fully end-capped, the peak shape will be sharp.
4. That will also have good peak shape for separation of basic, acidic, neutral compounds.

- **2. Characteristics of Ecosil C8 Reversed-phase columns:**

1. Recommended for HPLC separations of higher hydrophobic samples and samples with strong retention on C8 stationary phase.
2. Fully end-capped and high stability make a good reproducibility for each column.
3. The separation has high selectivity and efficiency.

| HPLC COLUMN SELECTION BY USP LISTING | | | |
|--------------------------------------|--|---|-------------------------------------|
| USP Column Classification | Packing Material | Recommended Ecosil Column | Particle Shape |
| L1 | Octadecyl silane chemically bonded to porous silica or ceramic microparticles, 1.5 to 10 µm in diameter, or a monolithic rod. | Ecosil C18 Ecosil C18-SH Ecosil C18-Extend Ecosil C18-EPS Ecosil C18-AQ Ecosil C18-AQ PLUS | Spherical |
| L3 | Porous silica particles, 5 to 10 µm in diameter. | Ecosil Silica | Spherical |
| L7 | Octyl silane chemically bonded to totally porous silica particles, 1.5 to 10 µm in diameter. | Ecosil C8 Ecosil C8-SH Ecosil C8-EPS | Spherical Spherical Spherical |
| L8 | An essentially monomolecular layer of aminopropyl-silane chemically bonded to totally porous silica gel support, 3 to 10 µm in diameter. | Ecosil NH2 | Spherical |
| L10 | Nitrile groups chemically bonded to porous silica particles 3 to 10 µm in diameter | Ecosil CN | Spherical |
| L11 | Phenyl groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter. | Ecosil Phenyl | Spherical |
| L13 | Trimethylsilane chemically bonded to porous silica particles, 3 to 10 µm in diameter. | Ecosil C1 | Spherical |
| L20 | Dihydroxypropane groups chemically bonded to porous silica particles, 5 to 10 µm in diameter | Ecosil Diol | Spherical |
| L26 | Butyl silane chemically bonded to totally porous silica particles, 5 to 10 µm in diameter. | Ecosil C4 | Spherical |
| L62 | C30 silane bonded phase on a fully porous spherical silica, 3 to 15 µm in diameter. | Ecosil C30 | Spherical |

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Guangzhou Lubex Biological Technology Co., Ltd.

Certificate of Sole Distributorship

December 6, 2012

To Whom it may concern,

This letter is to certify that:

HYM BROTHERS ANALYTICAL SOLUTIONS P. LTD. having its principal place of 104, Champaklal Industrial Area, Near Sion Tel. Exchange, Sion (E), Mumbai - 22

is currently an authorized distributor for all of Lubex and Ecosil products of Guangzhou Lubex Biological Technology Co., Ltd. in India.

Should you have any questions, please do not hesitate to contact me directly at wangling@lubex.com.cn or phone at +86 20 28947741.

Best regards,

Angel Wang
Vice President



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CONTACT US



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WE'RE ALWAYS HAPPY TO HELP

Get in touch with us today!

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