

Silica Gels

Silica occurs naturally but, as such, is not sufficiently hydrated for chromatographic use, thus the silica gel used in chromatography is prepared synthetically. Silica gel (SiO_2) and alumina (Al_2O_3) are two adsorbents commonly used by the organic chemist for column chromatography. It is often used as a first purification step after an organic synthesis step. Removing precursors and by-product leaves a cleaner product.¹

Features

- Spherical, all-porous particles, offer-able low back pressure and good separation performance
- The purity range of SiO_2 is 99.9 to 99.99% (high purity grade: EP)
- Available wide variety of particle size (2 – 200 μm)
- Accuracy classification grade (DF) for analytical use
- Pore size distribution strictly controlled (60 – 260Å)
- Amorphous type silica, harmless for health

Applications

- Chromatography applications, separation and purification
- Release agent for cosmetics, fragrances and antiseptics
- Catalyst carriers or resin fillers
- HPLC packings

Alfa Aesar offers the following silica gels for use in preparative chromatography for HPLC.

Item	Description	Sizes
45798	Silica gel, HPLC grade, spherical, 2.2 micron APS, 120 angstroms, 99.99+%	1g, 5g
45797	Silica gel, HPLC grade, spherical, 2.2 micron APS, 80 angstroms, 99.99+%	1g, 5g
45803	Silica gel, HPLC grade, spherical, 3 micron APS, 120 angstroms, 99.99+%	1g, 5g, 25g
45804	Silica gel, HPLC grade, spherical, 3 micron APS, 260 angstroms, 99.99+%	1g, 5g, 25g
45802	Silica gel, HPLC grade, spherical, 3 micron APS, 70 angstroms, 99.99+%	1g, 5g, 25g
45809	Silica gel, HPLC grade, spherical, 5 micron APS, 70 angstroms, 99.99+%	5g, 25g
45810	Silica gel, HPLC grade, spherical, 5 micron APS, 120 angstroms, 99.99+%	5g, 25g
45812	Silica gel, HPLC grade, spherical, 5 micron APS, 260 angstroms, 99.99+%	5g, 25g
45795	Silica gel, HPLC/UHPLC grade, spherical, 1.6 micron APS, 110 angstroms, 99.99+%	1g, 5g
45796	Silica gel, HPLC/UHPLC grade, spherical, 1.8 micron APS, 110 angstroms, 99.99+%	1g, 5g
45820	Silica gel, preparative chromatography grade, spherical, 10 micron APS, 120 angstroms, 99.99+%	5g, 25g
45819	Silica gel, preparative chromatography grade, spherical, 10 micron APS, 60 angstroms, 99.99+%	5g, 25g
45825	Silica gel, preparative chromatography grade, spherical, 15 micron APS, 100 angstroms, 99.99+%	5g, 25g, 100g
45824	Silica gel, preparative chromatography grade, spherical, 15 micron APS, 60 angstroms, 99.99+%	5g, 25g, 100g
45831	Silica gel, preparative chromatography grade, spherical, 20 micron APS, 100 angstroms, 99.99+%	5g, 25g, 100g
45832	Silica gel, preparative chromatography grade, spherical, 20 micron APS, 150 angstroms, 99.99+%	5g, 25g, 100g
45830	Silica gel, preparative chromatography grade, spherical, 20 micron APS, 80 angstroms, 99.99+%	5g, 25g, 100g
45836	Silica gel, preparative chromatography grade, spherical, 50 micron APS, 60 angstroms, 99.9+%	25g, 100g
45816	Silica gel, preparative chromatography grade, spherical, 7.5 micron APS, 120 angstroms, 99.99+%	5g, 25g
45815	Silica gel, preparative chromatography grade, spherical, 7.5 micron APS, 80 angstroms, 99.99+%	5g, 25g

¹W.C. Still, M. Kahn and A. Mitra, *J. Org. Chem.*, 1978, 43, 2923.