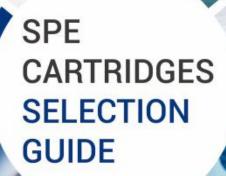




www.sheng-han.com







Add: No.151 Zhuzhou Road, Laoshan District, Qingdao, China

Tel: +86-532-68069317 FAX: +86-532-68069838 E-mail: inquiry@qdsrd.com

Skype/WhatsApp/ WeChat :+86 18865910928





COMPANY PROFILE

Qingdao Shenghan Chromatograph Technology Co., Ltd. (SHINE) was established in 2002, specializing in R&D, production, sales and after-sales service of chromatograph and relevant parts. It is a high-tech enterprise with ISO 9001 quality management system certification and ISO 24001 environmental management system certification. The total number of independent intellectual property rights, patents and software copyrights belonging to SHINE is about 100. At present, it has provided perfect solutions for 6000 + users in different industries.

Due to increasing needs of the market, our company has developed solid phase extraction cartridges, including C18, NJ, GCB / nh2s florisik PSA, HLB, etc. Chromatographic fillers are also independently developed and produced by our company.

In 2012, 2013 and 2016, SHINE has undertaken "National Major Scientific Instrument and Equipment Development Projects" for 3 times, and won the special "Science and Technology Enterprise Innovation Fund" project and the "National Key New Product Plan" project of the Ministry of Science and Technology. It has won the prizes of "Individual Champion of Manufacturing Industry in Shandong and "The Third Batch of National Manufacturing Industry Single Champion Cultivation Enterprises", and has been shortlisted in "2019 Shandong High Tech Top 50 Brand"list and become "China's Top 500 Patent Enterprises".



SOLID PHASE EXTRACTION CARTRIDGES

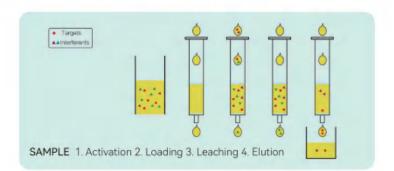


Solid phase extraction technology is based on the theory of liquid-solid chromatography. The samples are enriched, separated and purified by selective adsorption and elution. SPE is a physical extraction process including liquid phase and solid phase. In the process of solid phase extraction, the adsorption force of the adsorbent on the target compound is greater than that of the sample. When the sample passes through the SPE cartridge, the target compound is adsorbed on the surface of the solid, and other components pass through the cartridge with the sample. Finally, the target compound is eluted and collected with appropriate solvent, and then chromatographic analysis is carried out. In recent years, as a sample pretreatment technology, solid phase extraction has been more and more widely used in the laboratory.

OPERATION STEPS

The operation is slightly different for different filler retention mechanisms (filler retention of target compounds or retention of impurities).

1. The filler retains the target compound Solid phase extraction generally has four steps (Fig. 1)



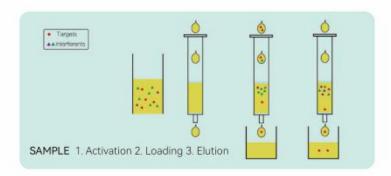




- Activation remove impurities in the cartridge, activate the filler and create a suitable solvent environment.
- (2) Loading dissolve the sample with a certain solvent, move it into the cartridge and keep the components on the cartridge.
- (3) Leaching remove interferences.
- (4) Elution elute the tested substance with a small amount of solvent and collect it.

2. Filler retention impurities

Solid phase extraction generally has three steps (Fig. 2)



- (1) Activation remove impurities in the cartridge, activate the filler and create a suitable solvent environment.
- (2) Loading move the sample into the cartridge. At this time, most of the target compounds will flow out with the sample, and the impurities will be retained on the cartridge. Therefore, this step should start to collect.
- (3) Elution elute the components with a small volume of solvent and collect them, and combine the collected solution.

ORDER INFORMATION OF SPE CARTRIDGES

Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
19	500mg	3ml	50pcs/pk	SH3-1001
	500mg	6ml	30pcs/pk	SH3-1002
NH2	1g	6ml	30pcs/pk	SH3-1003
14112	300mg	3ml	50pcs/pk	SH3-1004
	200mg	3ml	50pcs/pk	SH3-1005
	200mg	6ml	30pcs/pk	SH3-1006
	500mg	3ml	50pcs/pk	SH3-2001
	500mg	6ml	30pcs/pk	SH3-2002
	1g	6ml	30pcs/pk	SH3-2003
	2g	12ml	20pcs/pk	SH3-2004
	60mg	3ml	50pcs/pk	SH3-2005
	1g	3ml	50pcs/pk	SH3-2006
	100mg	3ml	50pcs/pk	SH3-2007
C18	200mg	3ml	50pcs/pk	SH3-2008
	300mg	3ml	50pcs/pk	SH3-2009
	300mg	6ml	30pcs/pk	SH3-2010
	1g	12ml	20pcs/pk	SH3-2011
	60mg	6ml	30pcs/pk	SH3-2012
8	5g	12ml	20pcs/pk	SH3-2013
	1500mg	6ml	30pcs/pk	SH3-2014





Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
C10	200mg	6ml	30pcs/pk	SH3-2015
C18	10g	60ml	20pcs/pk	SH3-2016
	200mg/200mg	3ml	50pcs/pk	SH3-3001
GCB	300mg/500mg	6ml	30pcs/pk	SH3-3002
NH2 Composite	500mg/500mg	6ml	30pcs/pk	SH3-3003
Cartridge	250mg/250mg	3ml	50pcs/pk	SH3-3004
	200mg/500mg	6ml	30pcs/pk	SH3-3005
GCB NH2 C18	500mg/500mg/500mg	6ml	30pcs/pk	SH3-3006
	500mg	3ml	50pcs/pk	SH3-4001
CN	500mg	6ml	30pcs/pk	SH3-4002
	1g	6ml	30pcs/pk	SH3-4003
	500mg	3ml	50pcs/pk	SH3-5001
	500mg	6ml	30pcs/pk	SH3-5002
PSA	1g	6ml	30pcs/pk	SH3-5003
	200mg	3ml	50pcs/pk	SH3-5004
	250mg	6ml	30pcs/pk	SH3-5005
	500mg	3ml	50pcs/pk	SH3-6001
	500mg	6ml	30pcs/pk	SH3-6002
Florisil	1g	6ml	30pcs/pk	SH3-6003
	200mg	3ml	50pcs/pk	SH3-6004

Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
	100mg	3ml	50pcs/pk	SH3-6005
Florisil	1g	12ml	20pcs/pk	SH3-6006
FIORISII	2g	12ml	20pcs/pk	SH3-6007
	3g	12ml	20pcs/pk	SH3-6008
	500mg	3ml	50pcs/pk	SH3-7001
Acid	500mg	6ml	30pcs/pk	SH3-7002
Alumina	1g	6ml	30pcs/pk	SH3-7003
	200mg	3ml	50pcs/pk	SH3-7004
	500mg	3ml	50pcs/pk	SH3-8001
	500mg	6ml	30pcs/pk	SH3-8002
	1g	6ml	30pcs/pk	SH3-8003
	2g	12ml	20pcs/pk	SH3-8004
Alkaline Alumina	200mg	3ml	50pcs/pk	SH3-8005
	1g	12ml	20pcs/pk	SH3-8006
	60mg	3ml	50pcs/pk	SH3-8007
	2g	6ml	30pcs/pk	SH3-8008
	2.5g	60ml	20pcs/pk	SH3-8009
	500mg	3ml	50pcs/pk	SH3-9001
Neutral	500mg	6ml	30pcs/pk	SH3-9002
Alumina	1g	6ml	30pcs/pk	SH3-9003
	22g	60ml	20pcs/pk	SH3-9004





Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
	1g	3ml	50pcs/pk	SH3-9005
	10g	12ml	20pcs/pk	SH3-9006
	5g	12ml	20pcs/pk	SH3-9007
	6g	12ml	20pcs/pk	SH3-9008
Neutral	5g	6ml	30pcs/pk	SH3-9009
Alumina	1g	12ml	20pcs/pk	SH3-9010
	2g	6ml	30pcs/pk	SH3-9011
	200mg	3ml	50pcs/pk	SH3-9012
	2g	12ml	20pcs/pk	SH3-9013
	250mg	3ml	50pcs/pk	SH3-9014
Neutral Alumina /GCB	500mg/500mg	6ml	30pcs/pk	SH3-9015
	500mg	3ml	50pcs/pk	SH3-10001
	500mg	6ml	30pcs/pk	SH3-10002
	1g	6ml	30pcs/pk	SH3-10003
	200mg	3ml	50pcs/pk	SH3-10004
Silica Gel	20g	60ml	20pcs/pk	SH3-10005
	2g	12ml	20pcs/pk	SH3-10006
	2g	6ml	30pcs/pk	SH3-10007
	60mg	3ml	50pcs/pk	SH3-10008
	690mg	3ml	50pcs/pk	SH3-10009
	30mg	1ml	50pcs/pk	SH3-11001

Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
	60mg	3ml	50pcs/pk	SH3-11002
	500mg	6ml	30pcs/pk	SH3-11003
	1g	6ml	30pcs/pk	SH3-11004
Mixed	500mg	3ml	50pcs/pk	SH3-11005
Strong Cation	150mg	6ml	30pcs/pk	SH3-11006
MCX	150mg	3ml	50pcs/pk	SH3-11007
	200mg	6ml	30pcs/pk	SH3-11008
	100mg	3ml	50pcs/pk	SH3-11009
	120mg	6ml	30pcs/pk	SH3-11010
	30mg	1ml	50pcs/pk	SH3-12001
	60mg	3ml	50pcs/pk	SH3-12002
	150mg	6ml	30pcs/pk	SH3-12003
Mixed	500mg	6ml	30pcs/pk	SH3-12004
Strong Anion	200mg	6ml	30pcs/pk	SH3-12005
MAX	1g	6ml	30pcs/pk	SH3-12006
	200mg	3ml	50pcs/pk	SH3-12007
	30mg	3ml	50pcs/pk	SH3-12008
	500mg	3ml	50pcs/pk	SH3-12009
Mixed -	30mg	1ml	50pcs/pk	SH3-13001
lon	60mg	3ml	50pcs/pk	SH3-13002
HLB	200mg	6ml	30pcs/pk	SH3-13003





Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
	500mg	6ml	30pcs/pk	SH3-13004
	160mg	6ml	30pcs/pk	SH3-13005
	200mg	3ml	50pcs/pk	SH3-13006
	1g	6ml	30pcs/pk	SH3-13007
Mixed	500mg	3ml	50pcs/pk	SH3-13008
lon HLB	150mg	6ml	30pcs/pk	SH3-13009
	600mg	6ml	30pcs/pk	SH3-13010
	120mg	6ml	30pcs/pk	SH3-13011
	60mg	6ml	30pcs/pk	SH3-13012
	500mg	3ml	50pcs/pk	SH3-14001
C8	500mg	6ml	30pcs/pk	SH3-14002
	1g	6ml	30pcs/pk	SH3-14003
	1g	6ml	30pcs/pk	SH3-15001
	4g	12ml	20pcs/pk	SH3-15002
	4g	60ml	20pcs/pk	SH3-15003
Diatomite	500mg	3ml	50pcs/pk	SH3-15004
	500mg	6ml	30pcs/pk	SH3-15005
	10g	60ml	20pcs/pk	SH3-15006
	2g	12ml	20pcs/pk	SH3-15007
SAX/PSA	200mg/200mg	3ml	50pcs/pk	SH3-16001
Composite Cartridge	300mg/500mg	6ml	30pcs/pk	SH3-16002

Type	Filler Content	Cartridge Volume	Specifications	Art.No.
SAX/PSA	500mg/500mg	6ml	30pcs/pk	SH3-16003
Composite Cartridge	250mg/250mg	3ml	50pcs/pk	SH3-16004
	250mg	3ml	50pcs/pk	SH3-17001
	250mg	6ml	30pcs/pk	SH3-17002
	500mg	6ml	30pcs/pk	SH3-17003
	1g	6ml	30pcs/pk	SH3-17004
GCB	1g	3ml	50pcs/pk	SH3-17005
	500mg	3ml	50pcs/pk	SH3-17006
	200mg	3ml	50pcs/pk	SH3-17007
	2g	12ml	20pcs/pk	SH3-17008
201/010	200mg/200mg	3ml	50pcs/pk	SH3-18001
PSA/C18 Composite	500mg/500mg	6ml	30pcs/pk	SH3-18002
Cartridge	1g/1g	6ml	30pcs/pk	SH3-18003
	200mg/200mg	3ml	50pcs/pk	SH3-19001
GCB/PSA	300mg/500mg	6ml	30pcs/pk	SH3-19002
	500mg/500mg	6ml	30pcs/pk	SH3-19003
	100mg	1ml	50pcs/pk	SH3-2000
	500mg	3ml	50pcs/pk	SH3-20002
Mixed Weak Cation WCX	1g	6ml	30pcs/pk	SH3-20003
	500mg	6ml	30pcs/pk	SH3-20004
	30mg	3ml	50pcs/pk	SH3-20005





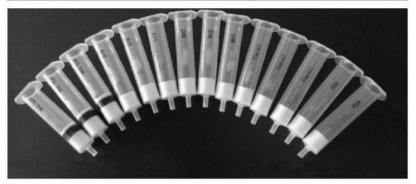
Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
Mixed Weak	60mg	3ml	50pcs/pk	SH3-20006
Cation WCX	150mg	6ml	30pcs/pk	SH3-20007
	500mg	3ml	50pcs/pk	SH3-21001
	500mg	6ml	30pcs/pk	SH3-21002
Mixed Weak	1g	6ml	30pcs/pk	SH3-21003
Anion WAX	60mg	3ml	50pcs/pk	SH3-21004
	150mg	6ml	30pcs/pk	SH3-21005
	30mg	3ml	50pcs/pk	SH3-21006
	100mg	1ml	50pcs/pk	SH3-22001
	500mg	3ml	50pcs/pk	SH3-22002
SAX	500mg	6ml	30pcs/pk	SH3-22003
	1g	6ml	30pcs/pk	SH3-22004
	100mg	3ml	50pcs/pk	SH3-23001
	250mg	6ml	30pcs/pk	SH3-23002
scx	500mg	6ml	30pcs/pk	SH3-23003
	60mg	3ml	50pcs/pk	SH3-23004
	100mg	12ml	20pcs/pk	SH3-23005
	500mg	3ml	50pcs/pk	SH3-24001
Anhydrous	500mg	6ml	30pcs/pk	SH3-24002
Sodium Sulfate	1g	6ml	30pcs/pk	SH3-24003
	2g	6ml	30pcs/pk	SH3-24004

Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
	500mg	3ml	50pcs/pk	SH3-25001
Activated Carbon	500mg	6ml	30pcs/pk	SH3-25002
	1g	1g/6ml	30pcs/pk	SH3-25003
	500mg	500mg/3ml	50pcs/pk	SH3-26001
	500mg	500mg/6ml	30pcs/pk	SH3-26002
Magnesium	1g	6ml	30pcs/pk	SH3-26003
Silicate	10g	60ml	20pcs/pk	SH3-26004
	60mg	3ml	50pcs/pk	SH3-26005
	2g	12ml	20pcs/pk	SH3-26006
	500mg	3ml	50pcs/pk	SH3-27001
	500mg	6ml	30pcs/pk	SH3-27002
	1g	6ml	30pcs/pk	SH3-27003
Polyamide	2g	6ml	30pcs/pk	SH3-27004
	150mg	6ml	30pcs/pk	SH3-27005
	150mg	3ml	50pcs/pk	SH3-27006
	60mg	3ml	50pcs/pk	SH3-27007
	2g	12ml	20pcs/pk	SH3-28001
TPT SPE Cartridges	1g	6ml	30pcs/pk	SH3-28002
cartriages	1g	3ml	50pcs/pk	SH3-28003
PSA/Silica Gel Glass Composite	500mg/500mg	6ml	30pcs/pk	SH3-29001





Туре	Filler Content	Cartridge Volume	Specifications	Art.No.
	500mg	3ml	50pcs/pk	SH3-30001
SLH	500mg	6ml	30pcs/pk	SH3-30002
	1g	6ml	30pcs/pk	SH3-30003
MAX/PSA	500mg/500mg	6ml	30pcs/pk	SH3-31001
C18-CN Mixed	200mg	3ml	50pcs/pk	SH3-32001
TPH	2g	12ml	20pcs/pk	SH3-33001
GCB/C18	500mg/500mg	6ml	30pcs/pk	SH3-34001
MCS	500mg	6ml	30pcs/pk	SH3-35001
Ploy-sery MIP-BAP	500mg	6ml	30pcs/pk	SH3-36001
Aflatoxin MFC	1g	3ml	50pcs/pk	SH3-37001
Pigment	150mg	6ml	30pcs/pk	SH3-38001
Sudan	500mg	3ml	50pcs/pk	SH3-39001



GLOBAL NETWORK

SHINE sales network covers all provinces, autonomous regions ,municipalities (including Hong Kong, Macao and Taiwan) in China and has exported to more than 40 overseas countries and regions such as UK, Germany etc. With excellent product quality, professional pre-sales team and perfect after-sales service, we have won the trust of customers globally.

