

Maximising potential returns

Natural Extracts Application Note

Removing heavy metal impurities from plant and animal extracts

About PhosponicS

PhosponicS actively works with key producers of high value natural extracts to develop new ways to remove unwanted heavy metals from your natural extracts to meet or even exceed your customers' requirements, opening up new market opportunities to increase your return on investment.

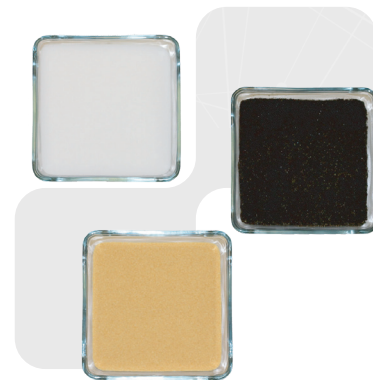


Superior purification

- Meet increasingly stringent customer requirements
- Opens up new market opportunities
- Fully scalable

Introducing PhosponicsS Metal Removal Products

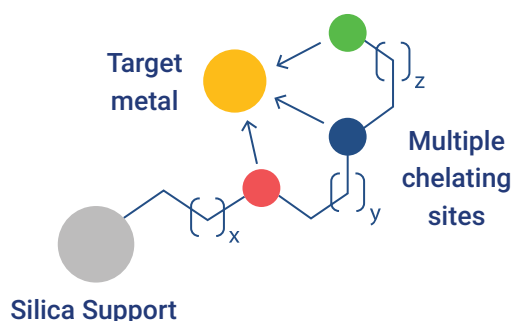
PhosponicsS has developed a range of superior performing silica products to meet the highest standards required by end customer for products intended for human use.



Product code	Product name
SPM32	Mercaptoalkyl 1 functionalised silica
SPA5	Aminoalkyl 2 functionalised silica
SEM26	Mercaptoalkyl 4 functionalised silica
MTCf	Alkyl thiourea functionalised silica
P01	Sodium alkyl phosphonate silica
POH1	Alkyl phosphonic acid silica
PEP-13	Amino alkyl, mercapto alkyl functionalised silica
SESA	Alkyl sulfonic acid modified silica

What Makes PhosponicsS Unique?

PhosponicsS uses patented technology for attaching powerful ligands to a silica backbone. The ability to incorporate multiple chelating sites enables our silica products to outperform other solid supported products, at every concentration of precious metal in your stream.



Advantages of the Phos series

- More powerful than standard solid adsorbents
- Designed to only recover precious metals
- Superior recovery performance

Advantages of silica as a support

- Highly porous for optimised stream flow
- Stable in both aqueous and organic media
- Larger surface area for higher loading

You can order a free 10g sample of your chosen heavy metal removal product by contacting any of our approved regional distributors.

Case Studies

PhosphonicS supporting the natural extracts industry

Due to the nature of the environment in which the plant and animal based sources of natural extracts grow and mature, unwanted contaminants can find their way into the end product which is destined for human use.

The effective removal of unwanted traces of heavy metals improves the success rate of meeting regulatory customer requirements and opens up new market opportunities for the producers of traditional remedies.

Ease of use, flexible formats

PhosphonicS can supply functionalised silica products in a wide range of formats for ease of use at different scales of operation.

Our heavy metal impurity removal products are applied either in slurry mode with overhead stirring or in a fixed bed mode. Whatever the scale of your production, we work with you to provide the right solution which is tailored to your needs.

Order Your Free Sample

To order your free 10g sample send an email requesting your choice of Heavy Metal Removal Product to PhosphonicS' approved distributor, details given below, or to sales@phosponics.com.

Contact PhosphonicS

PhosphonicS Ltd

7 The Quadrangle
Grove Business Park
Wantage, OX12 9FA

Phone: +44 1635 953300

Contact: sales@phosponics.com



Result

- Ba < 0.3 ppm
- In production

Stream

- Ba 5-10 ppm
- Aqueous

Ba removal from Ginseng extract



Result

- Fe < 5 ppm
- In production

Stream

- Fe (80 -120 ppm)
- Aqueous

Fe removal from Heparin extract



Result

- < 1 ppm
- In scale up trials

Stream

- Hg 10-15 ppm
- Aqueous

Hg removal from Fenugreek extract

