

# Restek Ultra-Clean Resin

## A Great Alternative to XAD<sup>®</sup>-2 Resin for Sampling Semivolatiles

Although resin is an excellent adsorbent for trapping PAHs and other semivolatiles, it requires extensive cleanup because many of its impurities are PAH compounds. To enable you to eliminate time-consuming cleanup, we do the cleaning for you! We test each batch by capillary GC-flame ionization detector to ensure cleanliness. However, depending on your application, additional cleaning may be required.

### Method Applications

METHOD	APPLICATIONS
EPA TO-13A	PAHs in Ambient Air
ASTM D6209	PAHs in Ambient Air
EPA Method 23	Dioxins in Stationary Source Emissions
EPA Method 0010	Semivolatiles in Stationary Source Emissions

### Frequently Asked Questions

*Is Restek's Ultra-Clean resin really the same as XAD<sup>®</sup>-2 resin?*

**Yes.** Restek's resin has been manufactured to match the original XAD<sup>®</sup>-2 specifications of composition, pore size, and surface area. You will experience identical sampling performance for all semivolatile compounds.

*Does Restek's Ultra-Clean resin need to be baked-out prior to use?*

**No.** Restek's resin is precleaned and prebaked. Unlike other resins, Restek's resin is rigorously cleaned and baked prior to being bottled. When we say our Ultra-Clean resin is precleaned, you can count on it!

### Or, you might consider...

#### SDVB Resin

Description	qty.	cat.#
SDVB Resin	1 kg	24053

- Styrene/divinylbenzene, equivalent to XAD<sup>®</sup>-2 resin.
- Untreated, packaged in 1 kg plastic containers.
- Spherical, 20 to 60 mesh particles.



### Ultra-Clean Resin

*Equivalent to XAD<sup>®</sup>-2 Resin*

- For adsorbing semivolatiles in air.
- Cleaned and GC tested.
- Available in 100-gram quantities.
- A Restek exclusive!

Description	cat.#
Ultra-Clean Resin, 100 grams	24230

Visit [www.restek.com](http://www.restek.com) for a complete product listing



Pure Chromatography

[www.restek.com](http://www.restek.com)

# Sampling Semivolatiles?

## Pair Your Ultra-Clean Resin With Polyurethane Foam (PUF) Plugs

- Both large high-volume (220–280 L/min) and small low-volume (1–5 L/min) PUFs available.
- Suitable for ambient, indoor, and industrial hygiene applications.
- PUF/Ultra-Clean resin “sandwiches” capture a wider range of semivolatiles.

### METHOD APPLICATIONS

Method	Applications	cat.#
EPA TO-10A	Organochlorine and organophosphorous pesticides, carbamate, pyrethrin, triazine, and urea pesticides	22116
EPA IP-7	Polycyclic aromatic hydrocarbons (PAHs)	22114
EPA IP-8	Organochlorine and organophosphorous pesticides, carbamate, pyrethrin, triazine, and urea pesticides	22116
ASTM D4861	Organochlorine and organophosphorous pesticides, PCB	22116
ASTM D4947	Chlordane and heptachlor residues	22116
Research	Pesticides	22117
EPA TO-4A	Organochlorine pesticides, PCBs	22114
EPA TO-9A	Polychlorinated dibenzo- <i>p</i> -dioxins (PCDDs)	22114
EPA TO-13A	Polycyclic aromatic hydrocarbons (PAHs)	22114
EPA 600/8-80-038	Organochlorine pesticides, PCBs, PAHs	22115
ASTM D6209	Polycyclic aromatic hydrocarbons (PAHs)	22114

### Cleaned Polyurethane Foam (PUF) Cartridges

Pre-cleaned and ready to use.

Description	qty.	cat.#
Cleaned PUF Plug (7.6 cm length, 6 cm diameter)	ea.	24295
Large PUF Cartridge, 65 mm OD x 125 mm length, 75 mm PUF	ea.	22114
Large PUF/XAD Cartridge, 65 mm OD x 125 mm length, 25 mm PUF/10 g XAD-2/50 mm PUF	ea.	22115
Small PUF Cartridge, 22 mm OD x 100 mm length, 76 mm PUF	ea.	22116
Small PUF/XAD Cartridge, 22 mm OD x 100 mm length, 30 mm PUF/1.5 g XAD-2/30 mm PUF	ea.	22117

### Raw Polyurethane Foam (PUF) Plugs

Unwashed PUF plugs for both low-volume and high-volume sampling.

Description	Size	qty.	cat.#
Large PUF Plug, Unwashed	6 cm OD x 7.6 cm length	10-pk.	22954
Large PUF Plug, Unwashed	6 cm OD x 5.1 cm length	10-pk.	22955
Large PUF Plug, Unwashed	6 cm OD x 2.5 cm length	10-pk.	22956
Small PUF Plug, Unwashed	22 mm OD x 7.6 cm length	10-pk.	22957

### PUF Glass Holders

Durable and reusable, PUF glass holders reduce waste and are a cost-effective alternative to pre-cleaned packed cartridges.

- Large glass holder fitted with double stainless steel screens for support.
- Small glass holder has stem designed for secure 1/4" ID tubing connection to sampling pump.

Description	Size	qty.	cat.#
Large PUF Glass Holder	fits 6 cm OD PUF Plug (4.9" L x 2.5" OD)	ea.	22964
Small PUF Glass Holder	fits 22 mm OD PUF Plug (4.4" L x 0.9" OD)	ea.	22965



22114



22115



22116



22117



22957



22955



22964



22965