

# Your Clear Choice for Pigment Removal

Agilent Carbon S sample preparation products



# Remove the Pigments Without Losing the Pesticides

Agilent Carbon S sample preparation products

Pigments can interfere with chromatographic separation and MS detection. Graphitized carbon black (GCB) is widely used during sample preparation to remove color from tomatoes, berries, coffee, and other highly pigmented food and environmental samples. However, using GCB for matrix cleanup can reduce recovery and reproducibility for sensitive targets such as planar pesticides.

Agilent Carbon S sample preparation products demonstrate superior results compared to GCB. They offer excellent removal of pigments and improved recoveries—especially for planar pesticides—with a simplified workflow.



# A Simplified Workflow



A simple and reliable sample preparation method is critical to your ability to detect trace amounts of analytes in complex food and environmental matrices. You can speed up your workflow and improve your detection of target analytes—particularly planar pesticides—with Agilent Carbon S.

## More reproducible results for pesticide analysis

The Carbon S sorbent improves your overall passing rate for multiclass multiresidue pesticide analysis over the traditional GCB sorbent—with improved recoveries and RSDs of planar pesticides. That adds up to better recoveries and RSDs.

## Simplify your sample preparation workflow

To improve planar pesticide recoveries with traditional GCB, the addition of toluene is commonly used. The extra steps increase cleanup time, and introduce a toxic solvent to your process. Carbon S sample preparation products give you all the advantages of greater pesticide recovery without the need for toluene. And that enables single-step LC and GC sample preparation (with a final drying step for GC).

**With their optimized carbon content and pore structure, Agilent Carbon S sample preparation products reliably remove coloring from the most challenging pigmented matrices.**





### Which Agilent products now include Carbon S?

The most popular Agilent sample preparation products now feature Carbon S in place of GCB, so you can make an easy switch without changing your current method.

#### 24 new QuEChERS products

- Universal kits
- AOAC kits
- EN kits

#### 10 new Bond Elut products

- Carbon S replacement in SPE tubes

#### 3 new Bond Elut products with Carbon S in bulk

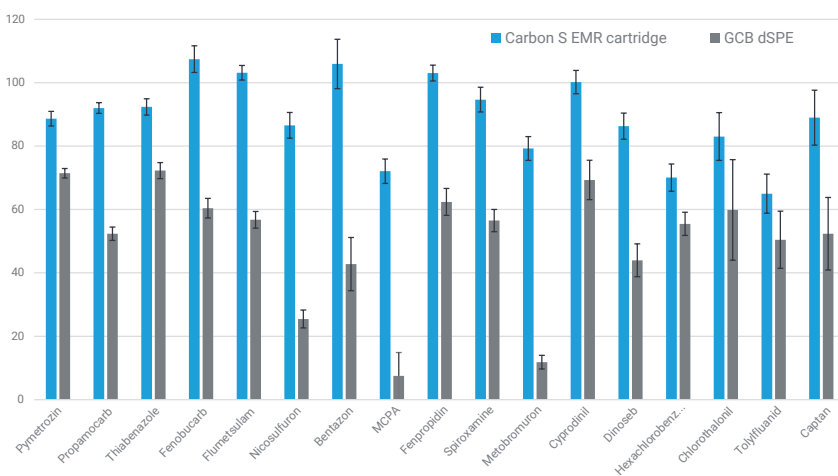
- Dramatically improved handling properties

#### 5 new Enhanced Matrix Removal (EMR) products for pass-through sample preparation

- Simplified cleanup workflow
- Designed to optimize performance
- Choice of products, based on your matrix

### Carbon S versus GCB: Pesticide recovery and reproducibility

Sensitive pesticides recovery (spiking @ 10 ppb in bell pepper, n=6)



Compared to a traditional GCB sorbent, Carbon S improved overall passing rate for multiclass multiresidue pesticides analysis.

## Ordering Information

Choose your Agilent Carbon S part number based on the current part number with GCB and product description.

### QuEChERS dSPE kits

Description	Current Part Number	New Part Number
QuEChERS dSPE TFDA 15 mL, PSA, C18, MgSO <sub>4</sub> , 50/pk, w/Carbon S	5982-6664	<a href="#">5610-2054</a>
QuEChERS dSPE TFDA 15 mL, animal origin, 50/pk, w/Carbon S	5982-6665	<a href="#">5610-2055</a>
QuEChERS dSPE, ChP TCM, 50/pk, w/Carbon S	5610-2048	<a href="#">5610-2056</a>
QuEChERS dSPE GB 23200.113, tea and spice, 50/pk, w/Carbon S	5982-6670	<a href="#">5610-2057</a>
QuEChERS dSPE 2 mL, universal kit, 100/pk, w/Carbon S	5982-0028	<a href="#">5610-2058</a>
QuEChERS dSPE 2 mL, universal kit w/ceramic homogenizers, 100/pk, w/Carbon S	5982-0028CH	<a href="#">5610-2059</a>
QuEChERS dSPE 15 mL, universal kit, 50/pk, w/Carbon S	5982-0029	<a href="#">5610-2060</a>
QuEChERS dSPE 15 mL, universal kit, 50/pk, w/ceramic homogenizers, w/Carbon S	5982-0029CH	<a href="#">5610-2061</a>
QuEChERS dSPE 2 mL, pigment sample (AOAC like), 100/pk, w/Carbon S	5982-5222	<a href="#">5610-2062</a>
QuEChERS dSPE 2 mL, pigment sample (AOAC like), w/ceramic homogenizers, 100/pk, w/Carbon S	5982-5222CH	<a href="#">5610-2063</a>
QuEChERS dSPE 15 mL, pigment sample (AOAC like), 50/pk, w/Carbon S	5982-5258	<a href="#">5610-2064</a>
QuEChERS dSPE 15 mL, pigment sample (AOAC like), w/ceramic homogenizers, 50/pk, w/Carbon S	5982-5258CH	<a href="#">5610-2065</a>
QuEChERS dSPE 2 mL, fat + pigments (AOAC like), 100/pk, w/Carbon S	5982-5421	<a href="#">5610-2066</a>
QuEChERS dSPE 2 mL, fat + pigments (AOAC like), w/ceramic homogenizers, 100/pk, w/Carbon S	5982-5421CH	<a href="#">5610-2067</a>
QuEChERS dSPE 15 mL, fat + pigments (AOAC like), 50/pk, w/Carbon S	5982-5456	<a href="#">5610-2068</a>
QuEChERS dSPE 15 mL, fat + pigments (AOAC like), w/ceramic homogenizers, 50/pk, w/Carbon S	5982-5456CH	<a href="#">5610-2069</a>
QuEChERS dSPE 2 mL, pigment sample (EN like), 100/pk, w/Carbon S	5982-5221	<a href="#">5610-2070</a>
QuEChERS dSPE 2 mL, pigment sample (EN like), w/ceramic homogenizers, 100/pk, w/Carbon S	5982-5221CH	<a href="#">5610-2071</a>
QuEChERS dSPE 15 mL, pigment sample (EN like), 50/pk, w/Carbon S	5982-5256	<a href="#">5610-2072</a>
QuEChERS dSPE 15 mL, pigment sample (EN like), w/ceramic homogenizers, 50/pk, w/Carbon S	5982-5256CH	<a href="#">5610-2073</a>
QuEChERS dSPE 2 mL, high pigment (EN like), 100/pk, w/Carbon S	5982-5321	<a href="#">5610-2074</a>
QuEChERS dSPE 2 mL, high pigment (EN like), w/ceramic homogenizers, 100/pk, w/Carbon S	5982-5321CH	<a href="#">5610-2075</a>
QuEChERS dSPE 15 mL, high pigment (EN like), 50/pk, w/Carbon S	5982-5356	<a href="#">5610-2076</a>
QuEChERS dSPE 15 mL, high pigment (EN like), w/ceramic homogenizers, 50/pk, w/Carbon S	5982-5356CH	<a href="#">5610-2077</a>

## Ordering Information

Choose your Agilent Carbon S part number based on the current part number with GCB and product description.

### Bond Elut SPE

Description	Current Part Number	New Part Number
Bond Elut 50 mg, 1 mL, 100/pk, w/Carbon S	126414	<a href="#">5610-2078</a>
Bond Elut 100 mg, 1 mL, 100/pk, w/Carbon S	126418	<a href="#">5610-2079</a>
Bond Elut Jr 250 mg, 100/pk, w/Carbon S	446424	<a href="#">5610-2080</a>
Bond Elut Jr 400 mg, 100/pk, w/Carbon S	466430	<a href="#">5610-2081</a>
Bond Elut 250 mg, 6 mL, 30/pk, w/Carbon S	12102201 or 5982-4432	<a href="#">5610-2082</a>
Bond Elut 500 mg, 6 mL, 30/pk, w/Carbon S	12252201 or 5982-4465	<a href="#">5610-2083</a>
Bond Elut/NH2 500 mg, 6 mL, 30/pk, w/Carbon S	12252202 or 3664325032	<a href="#">5610-2084</a>
Bond Elut 300/NH2 500 mg, 6 mL, 30/pk, w/Carbon S	2264265032 or 5982-4569	<a href="#">5610-2085</a>
Bond Elut 250 mg/PSA 250 mg, 3 mL, 50/pk, w/Carbon S	12102042C250 or 5982-4567	<a href="#">5610-2086</a>
Bond Elut 500 mg/PSA 500 mg, 6 mL, 30/pk, w/Carbon S	12102042C500 or 5982-4568	<a href="#">5610-2087</a>

### Enhanced Matrix Removal

Description	Current Part Number	New Part Number
Enhanced Matrix Removal high chlorophyll fresh 1 (EMR-HCF1), with NH2, 3 mL, 50/pk	NA	<a href="#">5610-2088</a>
Enhanced Matrix Removal high chlorophyll fresh 2 (EMR-HCF2), with PSA, 3 mL, 50/pk	NA	<a href="#">5610-2089</a>
Enhanced Matrix Removal general pigmented fresh (EMR-GPF), 3 mL, 50/pk	NA	<a href="#">5610-2090</a>
Enhanced Matrix Removal general pigmented dry (EMR-GPD), 6 mL, 30/pk	NA	<a href="#">5610-2091</a>
Enhanced Matrix Removal low pigment dry (EMR-LPD), 6 mL, 30/pk	NA	<a href="#">5610-2092</a>

### Bulk Carbon S

Description	Current Part Number	New Part Number
Carbon S bulk, 25 g	5982-4482	<a href="#">5610-2093</a>
Carbon S bulk, 100 g	64100G	<a href="#">5610-2094</a>
Carbon S bulk, 10 g	6410G	<a href="#">5610-2095</a>

# Even small amounts of particulates can ruin your column—and your results

Filtering samples before analysis can help you achieve longer column life, improve sample integrity, and maximize instrument performance and uptime.

Agilent Captiva filtration products are a time-saving, cost-effective way to stay in command of your analyses. And that means you can meet your unrelenting analytical demands and expectations for quality, speed, and accuracy.

## Captiva disposable syringes

All two-part Captiva disposable syringes are made of high-quality polyethylene and polypropylene. They allow you to accurately dispense liquid volumes and filter samples before analysis, in conjunction with the Agilent Captiva syringe filter.

Choose the correct size of your disposable syringe based on the volume and the syringe filter size.

Product Description	Syringes Per Package	Sterile	Blister Pack	Luer Lock	Luer Slip	Part Number
1 mL sterile Luer slip	100	•	•		•	5610-2107
ValueLab 1 mL non-sterile bulk Luer slip	7,000				•	5610-2108
2 mL (3 mL) Luer Lock Sterile	100	•	•	•		5610-2109
2 mL (3 mL) Luer Lock bulk	6,300			•		5610-2110
ValueLab 2 mL non-sterile bulk Luer slip	6,300				•	5610-2111
5 mL (6 mL) Luer Lock Sterile	100	•	•	•		9301-6476
5 mL (6 mL) Luer Lock bulk	3,600			•		5610-2112
ValueLab 5 mL non-sterile bulk Luer slip	3,600				•	5610-2113
10 mL (12 mL) Luer Lock Sterile	100	•	•	•		9301-6474
10 mL (12 mL) Luer Lock bulk	2,000			•		5610-2114
ValueLab 10 mL non-sterile bulk Luer slip	2,000				•	5610-2115
20 mL (24 mL) Luer Lock Sterile	100	•	•	•		5190-5103
20 mL (24 mL) Luer Lock bulk	1,000			•		5610-2116
ValueLab 20 mL non-sterile bulk Luer slip	1,000				•	5610-2117

Need help finding a syringe filter product? Try our Captiva syringe filter selector tool: [www.agilent.com/chem/syringe-filter-selector](http://www.agilent.com/chem/syringe-filter-selector)



Agilent Captiva syringe filters—used with our best-in-class syringes—remove particulates and are ideal for simple mechanical filtration.



Filtering is easier than ever with Agilent Captiva filter vials—now with preslit septa options. Just fill, cover, and plunge.

## Agilent CrossLab services: From insight to outcome

CrossLab is an Agilent capability that integrates services and consumables to support workflow success and important outcomes like improved productivity and operational efficiency. Through CrossLab, Agilent strives to provide insight in every interaction that helps you achieve your goals. CrossLab services include method optimization, flexible service plans, and training for all skill levels. We have many other products and services to help you manage your instruments and your lab for best performance.

Learn more about CrossLab at [www.agilent.com/crosslab](http://www.agilent.com/crosslab)



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