

TOX/AOX Products

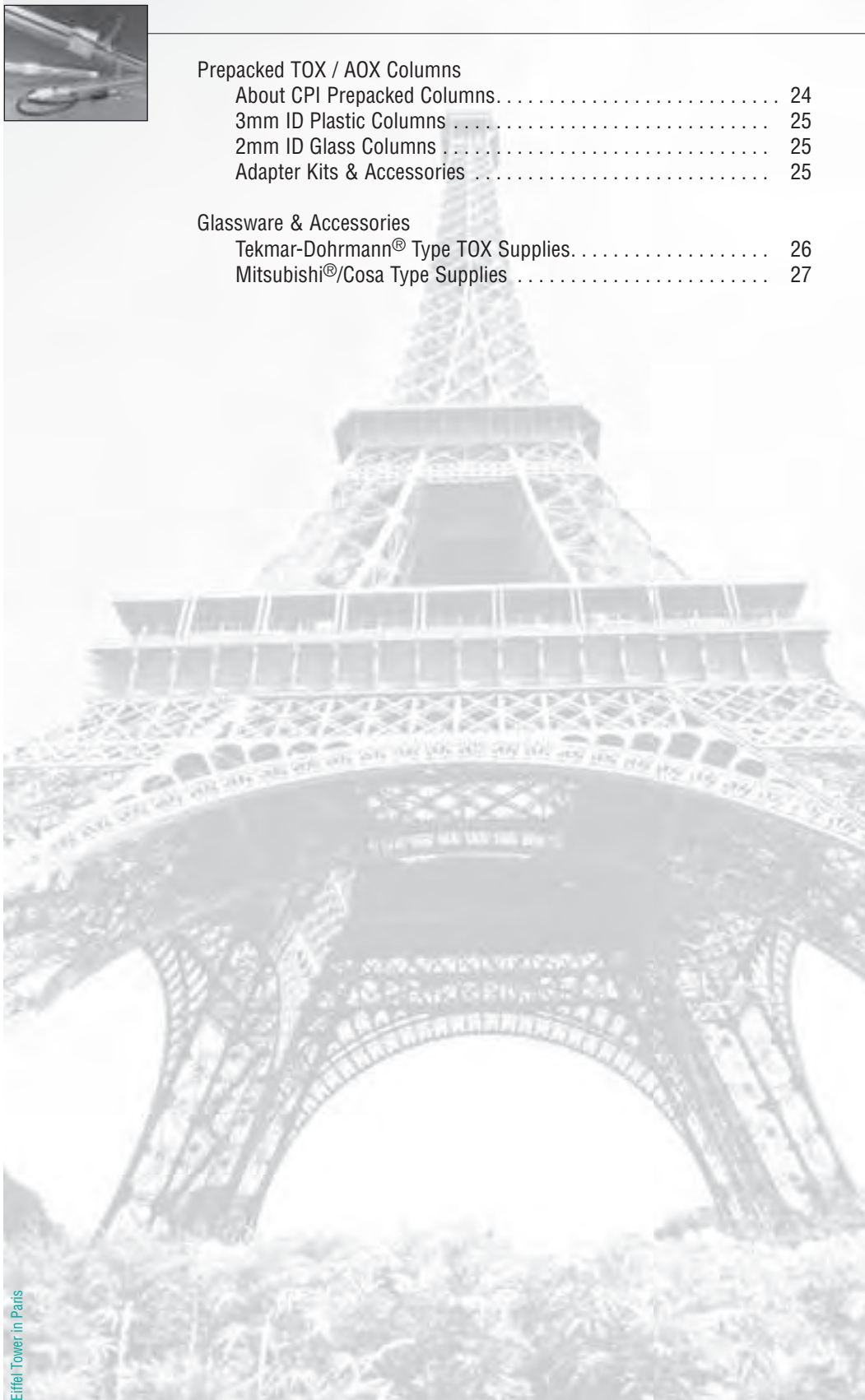


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The TOX/AOX products offered by CPI International are designed to provide accurate, reliable results that reduce the uncertainties present in many lab environments. CPI International offers consumable Glassware analysts need to operate TOX instrumentation, including our own patent-pending TOX/AOX columns for faster, more reproducible sample analysis.

Eiffel Tower in Paris



CPI Prepacked TOX/AOX columns are self-contained prepacked columns for use in EPA Methods 9020 and 1650. These products eliminate the need to hand pack carbon columns in the laboratory. CPI Prepacked TOX/AOX columns eliminate traditional problems associated with hand packed columns such as inconsistent data, contaminated carbon, numerous parts, and tedious labor. In addition to replacing hand packed columns, these products eliminate the need for cumbersome column housings. High precision CPI Glass-packed™ and CPI-packed™ columns offer these advantages:

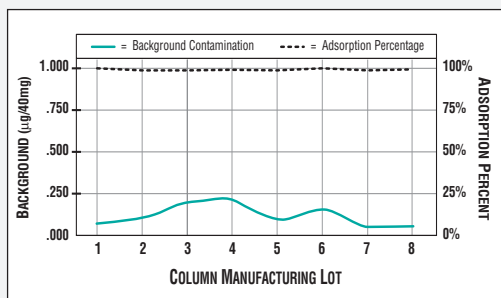
- Increased technician productivity
 - Longer shelf life with reduced contamination risk
 - Consistent and low backgrounds

CPI Prepacked TOX columns meet EPA Specifications and are now OEM equipment on all new Dohrmann® and Euroglas® TOX instruments.

What Makes CPI Prepacked Columns Unique?

Consistent, Low Blanks... Guaranteed.

Each CPI Prepacked column is filled with 40mg of our low background Granular Activated Carbon (GAC). The GAC and organic binder free cerafelt material are placed within an airtight nitrogen filled cavity, created by the body of the column and the removable caps on each end.



Prior to use, thin diaphragms in each of the caps are punctured to allow the sample to flow through. Once adsorption is complete, the caps are removed to eject the carbon into the sample boat. This design ensures longer shelf life and consistently lower blanks because it protects the GAC from possible lab and other external contamination.

CPI Prepacked columns are warranted to be below EPA 1.0µg/40mg blank specifications and CPI Glass-packed™ columns, below 0.6µg/40mg. We offer a money-back, 100% satisfaction guarantee on these products.

Easier Ejecting of Carbon into Quartz Boat...

Once adsorption is complete, the caps at each end of the column are removed using the CPI Ejector Tool. This tool is also used to eject the carbon from the column. The tool is comprised of a body which securely holds the column in place and a handle which, when squeezed, forces a rod through the column and thus ejects the carbon. Our patented Ejector Tool makes ejection of carbon much easier and helps prevent loss of sample due to an impacted column.

Easy Installation on All TOX Instruments.

A one-time purchase of an adapter kit is needed to use CPI Prepacked TOX/AOX columns. Each adapter kit contains five fittings for the adsorption module to accept prepacked columns, five column joiner fittings, a diaphragm puncturing tool, and our patented tool for removing column caps and ejecting carbon. Installation of the adsorption module fittings takes only minutes and does not alter the equipment factory warranty.



CPI offers separate adapter kits designed specifically for Dohrmann®, Mitsubishi® or Euroglas® TOX instruments. See Ordering information for adapter kits under 2mm and 3mm column products on opposite page.

No Column Housings or O-Rings Needed!

Because CPI Prepacked TOX/AOX columns are self-contained, no column housings or o-rings are needed. These columns attach to your Dohrmann®, Mitsubishi®, or Euroglas® Adsorption unit via a simple adapter fitting. Once this fitting is in place, the columns plug in easily. Columns are joined together with simple press-fit connectors. This unique design prevents leaking and eliminates cleaning time.

Available in 2mm Glass and 3mm Plastic Formats...

CPI Glass-packed™ 2mm ID columns

These columns are prepacked glass columns with a 2mm ID for use with low level samples demanding the utmost in organic-free background. Backgrounds are guaranteed to be consistent and below 0.6µg/40mg. CPI 2mm ID glass prepacked columns produce maximum adsorption and minimal breakthrough. Use of this product requires the one-time purchase of an adapter kit listed below.

Description	CPI P/N	Dohrmann® P/N	Quantity
Columns and Adapter Kits			
CPI Glass-packed™ Columns, 2mm ID	634-001	080-152	100
Filter Housing	634-001F	n/a	100
<i>Filter housings are columns containing only cerafelt material and may be used in-line above carbon columns to prefilter particulates from sample.</i>			
Adapter Kit, Mitsubishi® TOX-10 & Sigma-10	634-071	n/a	5 ports
Adapter Kit, Dohrmann® DX-20	634-070	n/a	5 ports
Adapter Kit, Dohrmann® DX-2000	634-006	080-153	5 ports

CPI-packed™ 3mm ID Columns

These columns are prepacked plastic columns with a 3mm ID for use with most drinking water and well samples. Backgrounds are guaranteed to be consistent and below EPA 1.0µg/40mg blank specification. Use of this product requires the one-time purchase of an adapter kit listed below.

Description	CPI P/N	Dohrmann® P/N	Quantity
Columns and Adapter Kits			
CPI-packed™ TOX Columns, 3mm ID	4010-69	080-145	100
Filter Housing	4010-69F	080-151	100
<i>Filter housings are columns containing only cerafelt material and may be used in-line above carbon columns to prefilter particulates from sample.</i>			
Adapter Kit, Mitsubishi® TOX-10 & Sigma-10	4010-71	n/a	5 ports
Adapter Kit, Dohrmann® DX-20	4010-70	899-900	5 ports

Accessories and Replacement Parts - 2mm & 3mm Columns

Description	CPI P/N	Dohrmann® P/N	Quantity
Column Joiners	4010-170	899-907	5
Adsorption Module Fittings, Dohrmann® DX-20	4010-770	080-146	5
White Teflon Washers	4010-772	080-148	5
Adsorption Module Fittings, Mitsubishi®	4010-771	080-149	5
Diaphragm Puncturing Tool	4010-775	899-157	5
Extractor Handle, 2mm columns	634-801	080-156	1
Extractor Handle, 3mm columns	4010-801	080-143	1
Extractor Body, 2mm columns	634-802	080-155	1
Extractor Body, 3mm columns	4010-802	080-142	1
Replacement Rod, for 634-801	634-804	n/a	1
Replacement Rods, for 4010-801	4010-804	080-144	5

TOX/AOX Products



CPI Glass-packed™ TOX/AOX Columns offer consistent backgrounds below 0.6µg/40mg and maximum adsorption for samples run under EPA method 9020 and 1650.



Include CPI Prepacked TOX/AOX Columns in an Annual Savings Contract or Standing Order Program and save on other TOX/AOX consumable supplies.

TOX/AOX Products



CPI 2mm ID Glass and 3mm ID Plastic Prepacked TOX Columns, P/N's 634-001 & 4010-69. These products eliminate the need for column housings and tedious column packing. See pages 24 & 25 for additional information.



For technicians who prefer to pack their own columns, CPI offers low background granular activated carbon. Available in two purity grades: $\leq 0.4\mu\text{g}/40\text{mg}$ background halides (P/N 475-002) and $\leq 1.0\mu\text{g}/40\text{mg}$ background halides (P/N 475-001).



Quartz Sample Boat, CPI P/N 655-001. Also available for AOX analysis, P/N 657-001, and for the DX-2000, CPI P/N 4010-010010.



Black Chlorine Electrode, P/N 735-001. Green, white and red electrodes also available.

Tekmar®/Dohrmann® Type TOX / AOX Supplies

In addition to designing specialty prepacked columns for TOX/AOX analysis, CPI also offers a full range of quartz glassware, and other consumable supplies for Dohrmann® TOX/AOX instrumentation.

Description	CPI P/N	Dohrmann® P/N	Quantity
Prepacked Columns			
CPI-packed™ TOX Columns, 3mm ID	4010-69	080-145	100
CPI Glass-packed™ Columns, 2mm ID	634-001	080-152	100
<i>2mm ID glass prepacked columns produce maximum adsorbance and minimal breakthrough.</i>			
Adapter Kit, 4010-69 Columns	4010-70	899-900	5 ports
Adapter Kit, 634-001 Columns	634-070	n/a	5 ports
<i>A one time purchase of an Adapter Kit is needed to use CPI Prepacked Columns.</i>			
<i>See Pages 24 and 25 for information about CPI Prepacked TOX / AOX columns and related accessories.</i>			
Adsorption Module			
Activated Carbon ($\leq 0.4\mu\text{g}/40\text{mg}$)	475-002	n/a	15 grams
Activated Carbon ($\leq 1.0\mu\text{g}/40\text{mg}$)	475-001	511-877	15 grams
Cerafelt, 1/2 inch, 5 x 10 inch	485-001	521-030	5 x 10 inch
Empty Columns	515-001	899-623	50
O-Ring Column Housing	724-001	899-626	25
Ejection Tool Replacement Rods (for 715-005)	715-006	n/a	5
Microcoulometer			
Pyrolysis Tube, Quartz	635-001	511-531	1
Pyrolysis Tube, Quartz, for DX-2000	4010-010020	890-022	1
Pyrolysis Tube, New Style, for DX-2000	4010-010021	40-0028-024	1
Wool, Quartz, 5 grams/pk	645-001	511-735	5 grams
Sample Boat, Quartz (GAC)	655-001	899-624	10
Sample Boat, Quartz, for DX-2000	4010-010010	890-097	1
Sample Boat, Quartz (Liquid Samples)	658-001	511-782	5
Exit Insert, Quartz	665-001	511-608	5
Inlet Insert, Quartz	675-001	511-538	5
Inlet Insert, Quartz (with cutout)	676-001	511-610	5
Ball Coupler, Quartz	680-001	511-537	1
O-Ring, Inlet Insert	724-002	899-603	10
O-Ring, Exit Insert	724-006	511-762	10
O-Ring, Pyrolysis Tube	724-007	899-316	5
Black Electrode, Chlorine	735-001	520-965	1
Green Electrode, Chlorine	735-002	520-966	1
White Electrode, Chlorine	735-003	520-964	1
Red Electrode, Chlorine	735-004	520-967	1
Red/White Septa, Cored	724-009	517-798	10
TOX Organic Standard, 1ml	805-001	n/a	1
<i>Above standard derived from 92.8mg 2, 4, 6 Trichlorophenol in 100mL methanol; 500ppm @ 10μL.</i>			
AOX / EOX			
Pyrolysis Tube, AOX	637-001	888-088	1
Sample Boat, AOX	657-001	888-094	5
EOX/TX Direct Syringe Adapter	681-001	511-234	1
Sample Boat, Quartz (liquid samples)	658-001	511-782	5

Mitsubishi® / COSA Type TOX / AOX Supplies

TOX/AOX Products

Description P/N	CPI COSA® P/N	Mitsubishi®/	Quantity
Prepacked Columns			
CPI-packed™ TOX Columns, 3mm ID	4010-69	n/a	100
CPI Glass-packed™ Columns, 2mm ID	634-001	n/a	100
<i>2mm ID glass prepacked columns produce maximum adsorbance and minimal breakthrough.</i>			
Adapter Kit, 4010-69 Columns	4010-71	n/a	5 ports
Adapter Kit, 634-001 Columns	634-071	n/a	5 ports
<i>A one-time purchase of an Adapter Kit is needed to use CPI prepacked columns. See Pages 24 and 25 for information about CPI Prepacked TOX / AOX columns and related accessories.</i>			
Adsorption Module, TOX-10 & Sigma-10			
Activated Carbon (≤ 0.4µg/40mg)	475-002	TX070/06570	15 grams
Activated Carbon (≤ 1.0µg/40mg)	475-001	n/a	15 grams
Cerafelt, 1/2 inch	485-001	n/a	5 x 10 in
Ceramic Wool	495-001	TX067/06540	5 x 10 in
Empty Columns	525-001	TX057/06450	30
O-Rings, Column Housing	724-001	TX060/06310	25
TOX-10 Microcoulometer			
Pyrolysis Tube, for TOX-10	636-001	TX010/06170	1
Pyrolysis Tube, 2-Part, for TOX-10	4010-63	n/a/06171	1
Pyrolysis Tube Body, for TOX-10	4010-64	n/a/06174	1
Pyrolysis Tube Insert, for TOX-10	4010-65	n/a/06172	1
O-Ring for 4010-63, 4010-73 and 636-001	4010-62	n/a/06851	12
Guide Tube	4010-67	TX011/06220	1
Wool, Quartz	645-001	TNQWL/06175	5 grams
Sample Boats, Quartz	657-001	SXSMBT/06280	5
TOX Organic Standard, 1mL	805-001	n/a	1
<i>Above standard derived from 92.8mg 2, 4, 6 Trichlorophenol in 100mL methanol; 500ppm @ 10µL.</i>			
Sigma-10 & TOX-100 Microcoulometer			
Pyrolysis Tube, 2-part, for Sigma-10	4010-73	17000&17010	1
Pyrolysis Tube Body, for Sigma-10	4010-74	17000	1
Pyrolysis Tube Insert, for Sigma-10	4010-75	n/a/17010	1
Single Pyrolysis tube, Sigma-10	4010-010049	17020	1
Pyrolysis tube, TOX-100	4010-010114	n/a	1
Wool, Quartz	645-001	TNQWL/06175	5 grams
Sample Boats, Quartz	657-001	SXSMBT/06280	5
TOX Organic Standard, 1mL	805-001	n/a	1
<i>Above standard derived from 92.8mg 2, 4, 6 Trichlorophenol in 100mL methanol; 500ppm @ 10µL.</i>			
Guide Tube, Sigma-10 only	4010-010050	17030	1

For technicians who prefer to pack their own columns, CPI offers low background granular activated carbon. Available in two purity grades; ≤ 0.4µg/40mg background halides (P/N 475-002) and ≤ 1.0 µg/40mg background halides (P/N 475-001).



Quartz Sample Boats, CPI P/N 657-001.



CPI 2mm ID Glass and 3mm ID Plastic Prepacked TOX Columns, P/N's 634-001 & 4010-69. These products eliminate the need for column housings and tedious column packing. See pages 24 & 25 for additional information.

