ULTRATECH INTERNATIONAL, INC.

Heavy Metal Removal Media Data Sheet

List of Filterable Metals

Rubidium, Lithium, Potassium, Caesium, Ammonium, Sodium, Calcium, Silver, Cadmium, Lead, Zinc, Barium, Strontium, Copper, Mercury, Magnesium, Iron, Cobalt, Aluminum, Chromium

Experimental Results

Percent Reduction (assumes 1" of head pressure and 15 second exposure time)

Initial Metal Concentration (ppm)	Percent Removal
4.0	30%
0.4	50%

The saturation point of the Heavy Metal Removal Media is 0.07 mg heavy metal/g of Media (This translates to 31.8 g of heavy metal/lb of Media)

Capacity of different UltraTech products*

Part Number	Description	Capacity (grams of metal removed)
9397	Ultra-Drainguard, Heavy Metal Mode	190
9460	Ultra-HydroKleen Media Filter	285
9302	Ultra-Downspout Guard (Standard)	475
9301	Ultra-Downspout Guard (Large)	715
9454	Ultra-Filter Sock (9-foot length)	1145

** Actual results may vary based on initial metal concentration and site flow conditions*

Treatment train approach to removal of heavy metals from stormwater

For best results, consider a treatment train approach to your heavy metal removal. For example, if you are trying to lower the concentration of heavy metals in storm water coming off a metal roof (starting heavy metal concentration of 60 ppm in the storm water), you could install a standard Ultra-Downspout Guard at each roof drain (lowering the concentration to 42 ppm).

At the outlet of the Ultra-Downspout Guard, you could install one Ultra-Filter Sock (further reducing the concentration to 30 ppm) and then a second Ultra-Filter Sock (reducing the concentration to 21 ppm) around the inlet of the drainage catch basin.

Furthermore, you could install a Ultra-HydroKleen unit with three Ultra-HydroKleen HMRM 1.0 Media Filters in that catch basin (lowering the concentration of the heavy metals discharged from the site to 7 ppm – an overall reduction of 88%).

This treatment train would be capable of absorbing a total of 3.62 kg (8 lbs) of heavy metals, filtering a total of approximately 16,000 gallons of storm water.

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