# MetSorb Heavy Metals Removal

### Absorption Media for Arsenic, Antimony, Lead, and Uranium

**MetSorb® granular adsorbents** use a patented material to adsorb multiple metals at once. Empty bed contact times as low as 90 seconds achieves high removal efficiencies. The media affords a higher capacity and a lower level of ion interference than competitive iron and alumina based products.

MetSorb® media's works in drinking water applications with a pH range of 6.5–8.5.

## Treatment is required with drinking water levels of: Arsenic (As)

10 ppb in both the US and Canada Health impacts: Skin damage or problems with circulatory systems, and possible increased risk of getting cancer. Adsorbed through the skin (such as showers). Mostly found in the West, Southwest and Northeast.

#### Antimony (Sb)

6 ppb in both the US and Canada Health impacts: high cholesterol and decreased blood sugar. Potential carcinogen. Found intermittently everywhere

#### Uranium (U)

30 ppb per EPA guidelines
20 ppb under Canadian MAC (Maximum Acceptable
Concentration) guidelines
Health impacts: Increased risk of cancer, kidney toxicity
Found in the Midwest and East prevalently

#### Lead (Pb)

Levels of 15 ppb is an action level in the US 5 ppb under Canadian MAC regulations
Health Impacts: Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities; Adults: Kidney problems and high blood pressure.

Caused by older lead soldered pipes or natural deposits Found intermittently all over

#### Usage:

Point of Entry (POE, whole house) or point of use (POU, under sink) applications.



#### Occurence:

Ongoing water quality compliance testing has confirmed the presence of Arsenic, Antimony, Uranium and/or Lead and in many cases multiple contaminants, in water systems across the country.

In New England, regulators have identified the co-occurrence of Arsenic and Uranium, and with the support of the U.S. Geological Survey (USGS), are extending the water quality evaluations to include private residential wells. New Jersey wells similarly may be impacted by Arsenic or heavy metals. Sourcing treatment to effectively address both Arsenic removal and Uranium removal can represent additional challenges for small community water systems.

## Independent evaluations are concluding that Adsorption technologies often present a series of benefits:

- Lower Capital Costs
- Equipment and Installation
- Packaged Units Small Footprint
- Reduced Operational and Maintenance Activities
- Less Operational Oversight
- Less Mechanical/Electrical Sophistication
- Reduced Waste Generation
- Minimal Backwash
- No waste sludge generation



Products for Quality Water

