

## LIST OF CONTAMINANTS

Our standard SARATECH Air Filter is made of polymer-based spherical activated carbon, which reduces various contaminants. However, it is important to note that the filter efficiency strongly depends on the air temperature and the relative humidity. The typical range of temperature is 5-50°C and the relative humidity between 20% and 80%. Coconut shell based filter material, which is often used in the gas applications, performs well at up to 50-55% rel. humidity. In contrast, SARATECH® Air Filter has a high performance at a relative humidity up to 70-80%.

Below are a few samples of contaminants, which can be removed by SARATECH® Air Filters, and their sources:

<b>VOCs</b>	<b>Source</b>
Toluene, Xylene, n-Hexane, c-Hexane	solvents
Benzene, Jet Fuel	fuel
<b>HVOCs</b>	
PCBs, PCPs, Lindan, DDT	various
Limonene, Nonane, Aliphatic Hydrocarbons	various
and various substances with a high boiling point	various
Ozone	naturally present in the atmosphere, electrostatic precipitators with high voltage, old printers
NO <sub>2</sub>	burning processes

The standard SARATECH® filter material has a certain adsorptive capacity even at a high relative humidity also for:

<b>Acids and bases</b>	
HCl	burning processes
SO <sub>2</sub>	sulfur oxidation produced while burning coal, wood and sulfur-containing fuel
H <sub>2</sub> S	farm odors, rare gas
NH <sub>3</sub> :	farm odors

In addition, other SARATECH Air Filters have specially treated sorbents integrated in the material matrix to reduce substances like acids and bases through chemisorption. These substances would otherwise not be removed sufficiently with standard materials.

Contaminants samples and their typical sources are as follows:

<b>Bases:</b>	
NH <sub>3</sub> :	farm odors

## LIST OF CONTAMINANTS

### Acids

H<sub>2</sub>S:

farm odors

SO<sub>2</sub>:

sulfur oxidation produced while burning coal,  
wood and sulfur-containing fuel

HCl:

burning processes

Acetic Acid:

furniture wood, sealing materials

### Others:

Formaldehyde:

furniture wood