

Specifications for IQAir® MultiGas™ Gas Phase Media

Media Type

The IQAir MultiGas gas and odour control media consists of a special mix of activated carbon and impregnated alumina pellets of a granular, spherical, porous nature. The activated carbon media is composed of a non-impregnated, extruded carbon, ideal for the adsorption of gaseous contaminants with higher molecular weights. The alumina pellets are impregnated with potassium permanganate (KMnO₄) to remove gaseous contaminants through an oxidation process. The adsorbed gases are converted to non-toxic solids, which remain media-bound and are permanently removed from the environment. The IQAir MultiGas media thus provides optimum adsorption, absorption and chemisorption of a wide variety of gaseous contaminants and pollutants.



Media content (approx.)

IQAir system	total content	carbon / alumina ratio (by weight)
<i>IQAir HealthPro 150</i>	1.0 kg	0.4 kg / 0.6 kg
<i>IQAir HealthPro 250</i>	2.5 kg	1.0 kg / 1.5 kg
<i>IQAir GC MultiGas</i>	5.4 kg	2.2 kg / 3.2 kg
<i>IQAir GCX MultiGas</i>	9.8 kg	3.9 kg / 5.9 kg
<i>IQAir CleanZone 5200 MG</i>	46.0 kg	18.4 kg / 27.6 kg

Target Pollutants

The IQAir MultiGas consists of a special media mix and contains VOC media and ChemiSorber media in equal parts (by volume). Thus the MultiGas media offers the widest possible filtration spectrum for the most common gaseous pollutants and odours including:

- Hydrocarbons
- Volatile Organic Compounds (VOCs)
- Oxides of sulphur
- Formaldehyde
- Hydrogen sulfide
- lower molecular weight aldehydes & organic acids
- Nitric oxide
- higher molecular weight gases and odours

Process

The IQAir MultiGas media removes contaminant gases by means of the following processes:

- Adsorption
- Absorption
- Chemisorption

Removal Capacity

The IQAir MultiGas media mix is designed to meet the following approximate removal capacities:

- Toluene:	20.0% minimum by weight* of the respective media
- Trichloroethane:	20.0%
- Hydrogen sulfide:	8.0%
- Carbon disulfide:	7.3%
- Sulphur dioxide:	4.0%
- Nitric oxide:	2.8%
- Formaldehyde:	1.4%
- Ethylene:	1.0%

Performance

The IQAir MultiGas media is designed for 95% minimum removal efficiency in IQAir systems.**

* **Example:** "10% minimum by weight" means that 10 kg of media will have a holding capacity for approx. 1 kg (i.e. 10%) of gas.

** **Important Note:** Although specific IQAir models may be recommended for the control of certain contaminants, the manufacturers make no claim as to the specific air cleaning results that can be achieved under the user's individual operating conditions. The actual indoor air quality improvements that can be achieved with air cleaning systems depend not only on the system's performance, but also on factors which are specific to that indoor environment, and therefore beyond the control of the manufacturer. Important factors which will influence the air quality improvements include intensity of the contaminant and its source, the size of the indoor environment, the operating speed of the system, the number of air cleaners placed in the environment, ambient temperature and humidity as well as the state of saturation of the individual filter elements.