



# Product introduction of Filterd Fume Hood



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SAFETY WITH ME SAFOO FOLLOWING



## Background

Laboratory are places for scientific research and experimental operations, widely used in education, research, production and quality inspection, but the health problems of people engaged in experimental work are worrying. Epidemiological studies in the United States, Sweden and Britain show that chemicals, especially laboratory workers, have much higher mortality than the general population; the OHS statistics showed that laboratory workers live 10 years less than the average.

Air pollution in the laboratory is an important factor endangering the physical and mental health of researchers. If the application of ventilation is improper, it may aggravate the indoor air pollution and cause the external air pollution in the area. As the most critical local exhaust equipment for laboratory air pollution control, the performance of exhaust cabinet directly affects the health and safety of laboratory personnel.

From the analysis of policies and regulations issued in recent years, the relevant environmental regulatory documents will be gradually updated and improved in the future. From the latest release in 2020 DB11 / T1736-2020, laboratory units shall establish organic solvent registration and management system, prepare experimental operation specifications, select effective waste gas collection and purification device to reduce VOCS VOC emissions and prevent pollution of surrounding environment; Waste gas collection and purification device shall be simultaneous with the experimental operation.

## Product Function

SAFOO Filtered Fume Hood series to compliance, environmental protection, health, safety as the product concept, Equipped with an activated carbon molecular filter and an air particle filter, Can adsorb most of the chemical gases, When the researchers store the chemicals in the cabinet, The harmful gas is adsorbed by the filters in the filter device, The filtered air is circulated indoors, Clean gas storage cabinet does not exhaust the outside, Therefore, reduce the operating energy consumption of air conditioning and ventilation system (cost); And because the harmful gases are adsorbed by the filter, Not directly arranged outside, Can reduce the pollution to the atmospheric environment, The control concentration of the exhaust cabinet, the surface wind speed of the operation port and the exhaust purification effect of the stored chemical storage cabinet comply with the NFX 15 211:2009 standard (certified by ANSI Z 9.5-201), ASHRAE 110:1995 and JG / T38-2012 Wind pipe self-cleaning cabinet standard. 24 hours laboratory air, efficient and environmental protection. The products have passed ISO9001 quality management system certification, ISO14001 environmental management system certification, OHSAS18001 occupational health and safety management system certification, EU CE and other related certification, the application industry involves education and research, inspection and quarantine, medical and health, food pharmaceutical, chemical industry, environmental safety, defense and many other fields.



**Product technical parameters**

product model	Product Parameter	product picture
<b>GH080</b>	<p>Product name:Filtered Fume Hood (Fully transparent)</p> <p>Product model: GH080</p> <p>External Dimensions: 1245 * 800 * 620mm</p> <p>Internal Dimensions: 900 * 796 * 571mm</p> <p>Air treatment capacity: 240m<sup>3</sup>/h</p> <p>Average surface wind speed: 0.4-0.6m/s</p> <p>Power supply: AC 220V / 50HZ</p> <p>Power: 60W</p> <p>Noise: 50 dBA</p> <p>Operating hole type: triangular type (trapezoidal)</p> <p>Number of filters: 2 type D filters</p> <p>Number of fans: 1</p> <p>Lighting: Group 1 of LED lighting lights</p> <p>Display screen: a seven-inch LCD touch screen</p> <p>Countertops: Epoxy ester countertops</p> <p>Power cord: 1 root</p> <p>Control system: 1 set</p> <p>Alarm system: 1 set</p>	



<b>GH100</b>	<p>Product name: Filtered Fume Hood (Fully transparent)</p> <p>Product model: GH100</p> <p>External dimensions: 1245 * 1000 * 620mm</p> <p>Internal Dimensions: 900 * 996 * 571mm</p> <p>Air treatment capacity: 240m<sup>3</sup>/h</p> <p>Average surface wind speed: 0.4-0.6m/s</p> <p>Power supply: AC 220V / 50HZ</p> <p>Power: 60W</p> <p>Noise: 50 dBA</p> <p>Operating hole type: triangular type (trapezoidal)</p> <p>Number of filters: 2 type D filters</p> <p>Number of fans: 1</p> <p>Lighting: Group 1 of LED lighting lights</p> <p>Display screen: a seven-inch LCD touch screen</p> <p>Countertops: Epoxy ester countertops</p> <p>Power cord: 1 root</p> <p>Control system: 1 set</p> <p>Alarm system: 1 set</p>	
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**Products Parameters**

1. Metal components: the main material is 1.2mm high-quality cold-rolled steel plate, electrostatic powder spraying, covered with durable anti-chemical and lead-free coating, maintain high brightness and minimize the impact of corrosion and moisture.
2. Cabinet: the main material is 15mm transparent acrylic plate window with excellent weather resistance, excellent chemical resistance, not easy to aging, colorless transparent, transparent, visually comfortable, beautiful and generous.
3. Seven-inch LCD touch screen display, real-time temperature and humidity environment monitoring, fan monitoring, VOC concentration environment monitoring and integrated alarm system.
4. Adopt high-quality centrifugal fan, 24 volt current, stable performance, ultra-silent, and no spark static electricity.
5. High efficiency filtration system, select the arrangement and distribution according to the particle size, follow the ASTM standard, effectively for acid gas and organic gas, strong adsorption capacity, use high efficiency HEPA filter for particles, for particles greater than 0.3um, the filtration efficiency reaches 99.995%. The top filter module system according to the experimental requirements to meet a variety of different experiments. Optional organic filter (for the adsorption of organic solvents), ammonia filter (ammonia reagents, organic reagents), inorganic filter (for organic solvents and organic acid, can adsorption), HEPA filter (for solid powder adsorption, strong ability), formaldehyde filter (for the operation of formaldehyde reagent, organic reagents).
6. LED lighting power is equivalent to 10W fluorescent lamp, does not produce heat, safety does not affect the experimental environment temperature, energy saving, environmental protection and long life.



- 7. Epoxy ester mesa has superior chemical stability, super corrosion resistance, good impact resistance without damage, excellent high temperature resistance, integrated core, long service life, no delamination, no expansion, no cracking. Optional physical and chemical plate or ceramic countertop.
- 8. No need to install pipeline engineering, convenient installation, exhaust gas is not discharged, and a new type of environmental protection.
- 9. It can be placed on the desktop or configured with a mobile wheel seat, convenient and flexible, and suitable for any complex experimental site.

Product Model	Product Parameter	Product Picture
GA080	Product name: Filtered Fume Hood Product model: GA080 External Dimensions: 1245 * 800 * 620mm Internal Dimensions: 900 * 750 * 570mm Air treatment capacity: 240m <sup>3</sup> /h Average surface wind speed: 0.4-0.6m/s Power supply: AC 220V / 50HZ Power: 60W Volume: 50 dBA Operating hole type: triangular type (trapezoidal) Number of filters: 2 D-type filter modes Number of fans: 1 Lighting: Group 1 of LED lighting lights Display screen: a seven-inch LCD touch screen Countertops: Epoxy ester countertops Power cord: 1 root Control system: 1 set Alarm system: 1 set	



<p><b>GA100</b></p>	<p>Product name: Filtered Fume Hood                  Product model: GA100                  External dimensions: 1245 * 1000 * 620mm                  Internal Dimensions: 900 * 950 * 570mm                  Air treatment capacity: 240m<sup>3</sup>/h                  Average surface wind speed: 0.4-0.6m/s                  Power supply: AC 220V / 50HZ                  Power: 60W                  Volume: 50 dBA                  Operating hole type: triangular type (trapezoidal)                  Number of filters: 2 D-type filter modes                  Number of fans: 1                  Lighting: Group 1 of LED lighting lights                  Display screen: a seven-inch LCD touch screen                  Countertops: Epoxy ester countertops                  Power cord: 1 root                  Control system: 1 set                  Alarm system: 1 set</p>	
<p><b>GA127</b></p>	<p>Product name: Filtered Fume Hood                  Product model: GA127                  External Dimensions: 1245 * 1275 * 620mm                  Internal Dimensions: 900 * 1225 * 570mm                  Air treatment capacity: 300m<sup>3</sup>/h                  Average surface wind speed: 0.4-0.6m/s                  Power supply: AC 220V / 50HZ                  Power: 200W                  Volume: 50 dBA                  Operating hole type: triangular type (trapezoidal)                  Number of filters: 6 B-type filter modules                  Number of fans: 3                  Lighting: Group 1 of LED lighting lights                  Display screen: a seven-inch LCD touch screen                  Countertops: Epoxy ester countertops                  Power cord: 1 root                  Control system: 1 set                  Alarm system: 1 set</p>	



<b>GA160</b>	<p>Product name: Filtered Fume Hood                  Product model: GA160                  External Dimensions: 1245 * 1600 * 790mm                  Internal Dimensions: 900 * 1550 * 740mm                  Air treatment capacity: 300m<sup>3</sup> / h                  Average surface wind speed: 0.4-0.6m/s                  Power supply: AC 220V / 50HZ                  Power: 200W                  Volume: 50 dBA                  Operating hole type: triangular type (trapezoidal)                  Number of filters: 6 B-type filter modules                  Number of fans: 3                  Lighting: Group 1 of LED lighting lights                  Display screen: a seven-inch LCD touch screen                  Countertops: Epoxy ester countertops                  Power cord: 1 root                  Control system: 1 set                  Alarm system: 1 set</p>	
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**Products Parameters**

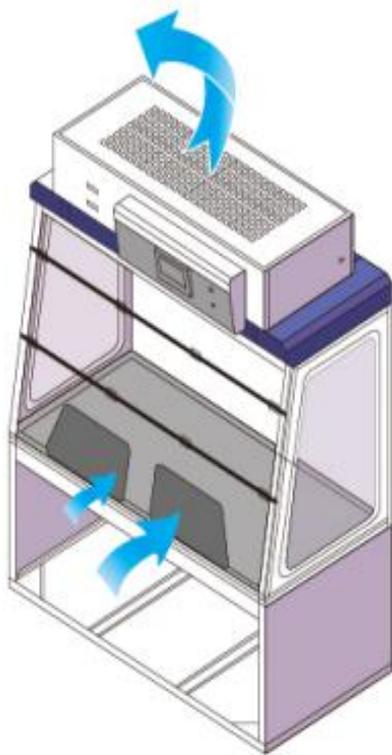
1. Metal components: the main material is 1.2mm high-quality cold-rolled steel plate, electrostatic powder spraying, covered with durable anti-chemical and lead-free coating, maintain high brightness and minimize the impact of corrosion and moisture.
2. Cabinet: the main material is 6mm acrylic plate window with excellent weather resistance, excellent chemical resistance, not easy to aging, colorless and transparent, transparent, visually comfortable, beautiful and generous.
3. Seven-inch LCD touch screen display, real-time temperature and humidity environment monitoring, fan monitoring, VOC concentration environment monitoring and integrated alarm system.
4. Adopt high-quality centrifugal fan, 24 volt current, stable performance, ultra-silent, and no spark static electricity.
5. High efficiency filtration system, select the arrangement and distribution according to the particle size, follow the ASTM standard, effectively for acid gas and organic gas, strong adsorption capacity, use high efficiency HEPA filter for particles, for particles greater than 0.3um, the filtration efficiency reaches 99.995%.The top filter module system according to the experimental requirements to meet a variety of different experiments.Optional organic filter (for the adsorption of organic solvents), ammonia filter (ammonia reagents, organic reagents), inorganic filter (for organic solvents and organic acid, can adsorption), HEPA filter (for solid powder adsorption, strong ability), formaldehyde filter (for the operation of formaldehyde reagent, organic reagents).
6. LED lighting power is equivalent to 10W fluorescent lamp, does not produce heat, safety does not affect the experimental environment temperature, energy saving, environmental protection and long life.
7. Epoxy ester mesa has superior chemical stability, super corrosion resistance, good impact



resistance without damage, excellent high temperature resistance, integrated core, long service life, no delamination, no expansion, no cracking.

8. No need to install pipeline engineering, convenient installation, exhaust gas is not discharged, and a new type of environmental protection.

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### Operational Principle

#### 1. Air inlet

Air can be pumped directly from the laboratory into the fume hood to form a negative pressure, and the stable surface wind speed forms a natural barrier to isolate users from the chemicals they are operating.

#### 2. Comprehensive filtration system

The fan system draws toxic and harmful gases up, filters them, and returns to clean air into the room. The excellent control concentration of the cabinet can ensure that the chemical gas in the cabinet will not return to the room, causing pollution.

#### 3. Clean the laboratory air

Different filters are configured according to different operations, effectively filter toxic and harmful gases, purify the laboratory air, remove chemical residual odor, and improve the laboratory clean level.

#### 4. Purify the surrounding air

The continuous filtration efficiency of the ventilator can help to purify the indoor air.