



DUCTLESS FUME HOODS Labopur®

NF X 15-211 - MAY 2009 - CLASS 2

WHY SHALL WE USE AN ENCLOSURE WITH RECIRCULATING AIR FILTRATION SYSTEM ?

When you are using chemicals, your health might be in danger due to the emanation of harmful and toxic vapors. To protect yourself and your close environment, you must manipulate your products in an enclosure using recirculating air filtration (formerly Enclosure for Toxics using Recirculating Air Filtration or ETRAF) equipped with a molecular filter or either particulate filter (HEPA filter) or both filters.

WHY SHALL WE CHOOSE AN ENCLOSURE LABOPUR® WITH RECIRCULATING AIR FILTRATION ?

Following its wide experience with safety cabinets and storage of dangerous products, ECOSAFE-leading manufacturer of safety cabinets-uses its entire technical knowledge to design and manufacture its fume hoods LABOPUR®. Made in EU, the ductless fume hoods LABOPUR® stand out by a high manufacturing quality and finishing. The entire process being controlled with the European standard ISO 9001 -2008.

Ductless fume hoods LABOPUR® provides the user a secured work space for the repetitive manipulations of small chemicals quantities. The dangerous vapours are confined in the enclosure, then cleaned while entering the active charcoal filter. Finally, dangerous vapors are rejected in the atmosphere without danger for the environment. Thus, the user's health is protected.



▲ H122Z + BB12 + TR12 + 2 x (CORG201 + SH200 + HEP 200)



▲ H061Z + BB06 + CORG201+ SH200 + HEP200

CERTIFICATION

Ductless fume hoods LABOPUR® were approved to the NF X 15-211 - may 2009 norm, by independent laboratories :

- The laboratory has approved the filtration part of the NF X 15-211.
- the containment part of the NF X 15-211 norm.
- the filter tightness and integrity testing (HEPA filter).

LABOPUR® ductless fume hoods are controlled according to quality process and procedures defined by the repository of international quality standard ISO 9001-2008, at the end of the assembly line and before their shipping to the user in order to assure a perfect functioning and efficiency.



NORMS

NF X 15-211 French norm- may 2009

NF X 15-211 French norm is the most demanding regulation today. It guarantees to the user a full safety allowing the user to focus on his manipulations.

Enclosures for toxic LABOPUR® using recirculating air filtration are classified according to 2 security levels :

- Class 1 : enclosure with safety reserve
- Class 2 : enclosure without safety reserve, the most common

Enclosures LABOPUR® using recirculating air filtration belongs to the class 2 :

- P type : particle filtration
- V type : vapors
- PV type : particle & vapors filtration

Ductless fume hoods LABOPUR® are recirculating air filtration enclosures from the class 2 which could be fitted, depending on the model, with filter for particles or for vapors or both.

To be in as per this standard, air filtration fume hood LABOPUR® have to meet multiple criteria (summary) :

- the enclosure must be provided with a ventilation device to maintain the air speed with a rate between 0,4 m/s and 0,6 m/s.
- rejection, downstream the filter, of 50% of the VLEP (occupational exposure limit value) of toxics treated in the enclosure in the duration of normal filter use.

• the enclosure must have been tested by an approved and independent laboratory.

• the class 2 enclosure have to be equipped with a sound or visual alarm actived every 60 working hours and also a sampling outlet device.

• the class 2 enclosure must not reject more than 50% of the VME downstream the filter during the detection test.



▲ H092Z + 2 (CORG201 + HEP200 + SH200) (Bench not included)



NF X 15-211



You will also find in this chapter :

Labopur® Ductless Fume Hoods	NF X 15-211 - may 2009	Range H
Labopur® Ductless fume hoods for powders	NF X 15-211 - may 2009	Range H
Labopur® Ductless fume hoods for dangerous powders and vapours	NF X 15-211 - may 2009	Range H
Rolling tables for fume hoods		Range H
Labopur® Ductless fume hoods with external connection		Range H
Labopur® Ductless Fume Hoods and Storage Cabinets - PMSF	NF X 15-211 - may 2009	Range H
Laminar flow clean benches, vertical	EN 12469 - ISO 14644-1	Range H
Ductless fume hood and storage cabinet with recirculating air - PMSF	EN 12469	Range H
Labopur® Filtering Ventilation Safety Cabinets (Active charcoal filters adsorption's capacity and filtration system tested and certified NF X 15-211)	NF X 15-211 - may 2009	Range 12.X
Labopur® Filtering Ventilation Safety Cabinets (Active charcoal filters adsorption's capacity and filtration system tested and certified NF X 15-211)	NF X 15-211 - may 2009	Range 14.X
Ventilation Safety Cabinets		Range 12
Ventilation Safety Cabinets	EN 11470-1	Range 3030.X
Labopur® Recycling Air Box (Active charcoal filters adsorption's capacity and filtration system tested and certified NF X 15-211)	NF X 15-211 - may 2009	Range H
Ventilation and filtration boxes	ISO 3744	Range V
ATEX ventilation boxes « with filter option »	ATEX Zone II	Range V

RANGE H**NF** X 15-211 class 2

DUCTLESS FUME HOODS Labopur®

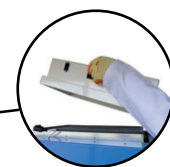
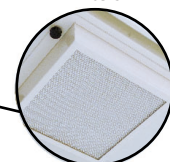
NF X 15-211 - MAI 2009 - CLASS 2



Timer



Filtralarm

Controller
Air flowErgonomic hand traps
(trapezoidal)Easy replacement of
filtersFilter frame and HEPA
filter (optional)Removable containment
sumpMelamine based
wood work top

▲ H092Z + BV09 + 2 x (CORG201 + SH200 + HEP200)

ADVANTAGES

User's optimal protection:

- Our fume hoods have been approved within the standard NF X 5-211 by an independent laboratory.
- Vapors are confined in the manipulation enclosure after being eliminated through the molecular filter.
- A front sampling outlet allows you a fast and reliable control of the filter saturation.
- A warning lamp located in facade informs you of the good functioning of the system of ventilation/filtration.
- Silent electric fan according to E.U specifications.
- A front control window indicates immediately if the filter is in place and well adapted to your work.

Save time and energy :

- Our hoods are delivered ready to use (already mounted). All you have to do is to plug them to a power supply device.
- No connecting evacuation, no civil engineering needed (if the hood is fitted with a filter).
- It is not necessary to heat or cool the air within the workroom.

Confort of use:

- The transparent wall sides of the fume hood offer an optimal lighting of the work-top and a direct sight of the working products.
- The ergonomic hand traps or trapezoidal opening allow secure and easy manipulations in the enclosure.
- Protective caps allow you to insert the power cables of your devices into the fume hoods.
- Silent fan allows you to focus on your work.
- Easy replacement of the active charcoal-based filter in a short time.

TECHNICAL DATA

- 15/10th steel construction.
- White epoxy painting RAL 9010 and Blue 5015, with high resistance against chemicals.
- PMMA glass walls.
- Average air speed at the front: 0.5 m / s.
- Voltage: 220-240 volts.
- Electrical power: 27 W.
- Intensity: 0.1 A
- Sound level of fan (excluding airflow): 57 dB (A).
- Flow rate: 170 m³ / h.

STANDARD EQUIPMENT:

- 4 covers for feed and fluid going through.
- Air Flow Controller.
- Timer.
- Sampling outlet.
- Transparent rear wall.

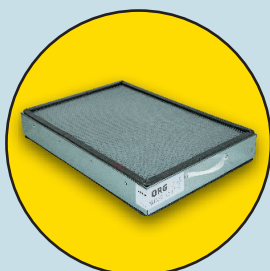
OPTIONAL EQUIPMENT:

- Manual pump to determine saturation of filters: PMAF.
- Reactive Tubes:
 - TROR: Pack of 10 «organic» reactive tubes
 - TRAC: Pack of 10 «corrosive» reactive tubes
 - TROA: Set of 5 «organic» and 5 corrosive reactive tubes
- A retention tank integrated under the work-top allows to get back liquids in case of accidental droppings.

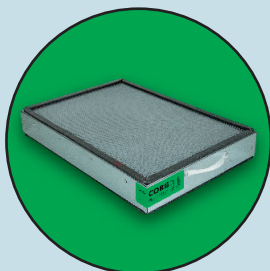


ACTIVE CHARCOAL FILTERS AND HEPA H14 FILTER

ACTIVE CHARCOAL FILTERS



▲ ORG200



▲ CORG201

Active charcoal is an extremely porous black charcoal allowing the adsorption of molecules from chemicals thanks to the high degree of microporosity (less than 2 µm).

Based on the chemicals you have to filter, active charcoal can be impregnated to improve the adsorption capacity. A specific impregnation could fit for one product and be unadapted for another one.

Our filters are made with the best active charcoal. In order to offer the best guarantees, the quality of filters adsorption was tested and approved by an independent laboratory. Every active charcoal filter is provided with a double anti-dust filter to insure an optimal filtration quality. Your health is protected. We offer 4 types of filters: one dedicated to organic vapors, one « Universal » for corrosive and organic vapors, one for formaldehyde vapors and one for ammonia vapors.

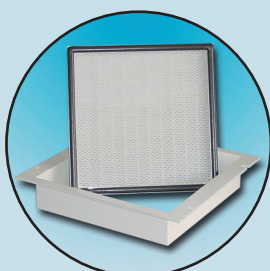
We offer 4 standard filters :

- Type ORG for organic vapors,
- Type CORG for corrosive and organic vapors
- Type FOR for formaldehyde vapors
- Type AMM for ammonia vapors

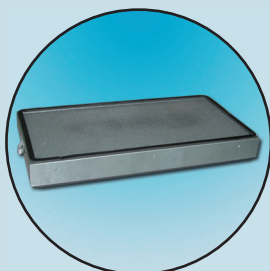
CORG filter adsorb a large majority of commonly used chemicals : organic and inorganic acids, solvents and organics. This filter can be used in most of the cases.

We also offer **specialized impregnated filters**, for example, for manipulation of specific chemicals. If you need further information please do not hesitate to contact-us.

HEPA H14 FILTER AND HEPA FILTER FRAME



▲ SH200 + HEP200



▲ CAR200

Hepa filter (High Efficiency Particulate Air) is an air filter with a very high efficiency.

The Hepa filtration efficiency is controlled and approved according to the norm NF EN 1822 and divided into 5 efficiency classes. The H14 Hepa filter which is the most efficient will stop 99,97% of the particles with a diameter equal or bigger than 0,3 µm.

When handling chemical powders, you have to use a standard particulate filter called HEPA. To guarantee the highest filtration efficiency, we choose a HEPA filter type H14 approved to the EN 1822 standards. In order to receive a HEPA filter, your ductless fume hood must be fitted with a dedicated frame type SH.

Your powders filter may need to be complemented by an additional active charcoal filter to provide you the best security and efficiency.

If you want to use your ductless fume hood for powders only, a specific kit should be taken. For further information, please refer to the paragraph « Kit for using ductless fume hood without active charcoal filter ».

N.B. : We deliver ductless fume hood only with either an active charcoal filter or a connecting kit for use without activated charcoal filter (CAR).



STANDARD EQUIPMENTS



FILTERALARM

Available as a standard feature on all Labopur Fumehoods with ventilation / filtration system, the filteralarm allows to measure the airflow in the filter thanks to an electronic chip, to detect and warn you of clogging of the filter or any anomaly of the airflow by a visual and audio signal. Furthermore, this controller's new generation can also display the hour counter.



AIR VELOMETER

According to the French standard NF X 15-211, your hood is supplied with an air velometer. It allows you to check permanently the velocity of the air in facade and verify that the fume hood works in depression guaranteeing the flow of vapors through the filter.



TRANSPARENT WALLS

Our fume hoods are delivered with transparent walls on every face offering you a clear working area.



PROTECTIVE CAPS

All of our fume hoods are equipped with protective caps allowing to easily insert power cable supplies or gas for instance.



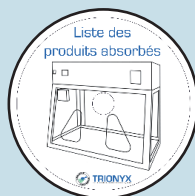
SAMPLING OUTLET

A front sampling outlet gives you the opportunity to check quickly and in a reliable way the saturation level of your active charcoal filter, thanks to the manual pump and reactive tubes.



TIMER

The standard timer supplied with your hood indicates you, all the time, the total use duration of your hood. After programming, every 60 hours, a sound alarm invites you to check the saturation of the active charcoal filter.



ADSORBED PRODUCTS BOOKLET

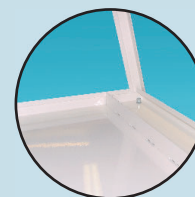
Following the standard NF X 15-211, your hood is delivered with a CD-Rom information guide regarding the adsorption capacity of the active charcoal filter in relation with various chemicals.

OPTIONAL EQUIPMENTS



MELAMINE BASED WOOD WORK-TOP

Manufactured in melamine based wood, it offers an excellent resistance to chemicals attacks.



RETENTION TANK

A retention tank is placed under each work-top being part of the fume hood. In case of leak or of accidental reversal, treated liquids are retained. To clean it, you just need to lift the work-top and use an « absorbent ».



TEMPERED GLASS WORK TOP.

Willing to handle extremely aggressive products? Choose a tempered glass work-top instead of a H.P.L. top (in standard within the LABOPUR hoods).



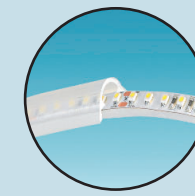
MANUAL PUMP AND REACTIVE TUBES

TAKE CARE OF YOUR HEALTH! Check your active charcoal filter saturation thanks to the manual pump and reactive tubes. We offer you a wide range of reactive tubes depending on your products used.



ACTIVE CHARCOAL FILTERS AND HEPA H14 FILTERS

The fume hoods are delivered without active charcoal filters and/or HEPA H14 filters. You must select one depending on your chemicals used. Consult our active charcoal filters selection guide.

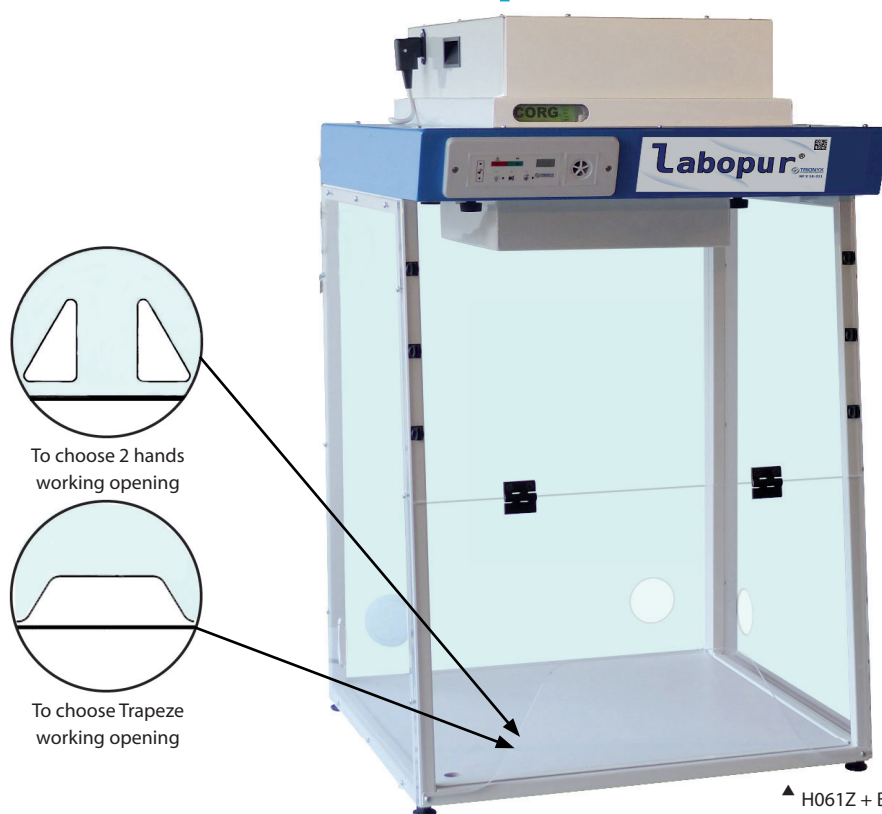


LIGHTING

We offer you a LED which is integrated into the enclosure while being the handling zone. IP65 - 10W - 4200K - 710lm



Labopur® 600 mm



▲ H061Z + BB06 + CORG201+ SH200 + HEP200

Fume Hood without bottom work-top to equip, see accessories		H06
External dimensions (H x W x D in mm)		950 x 600 x 650
Internal dimensions (H x W x D in mm)		735 x 545 x 505
Weight (kg)		23
Number of filter module / Fan		1
Working opening type	2 hands	Trapeze
Reference	H061D	H061Z
For chemical use only		
Active charcoal filter for organic vapors		ORG200 (11 kg)
Active charcoal filter for corrosive and organic vapors		CORG201 (12 kg)
Active charcoal filter for formaldehyde vapors		FOR200 (12 kg)
Active charcoal filter for ammonia vapors		AMM 200 (12 kg)
For powder use only		
H14 Hepa filter		HEP200 (2 kg)
Hepa filter holder		SH200 (4 kg)
Ventilation element(s) (required for use of powders only)		CAR200 (2 kg)
For powder and chemical use		
H14 Hepa filter for powder handling		HEP200 (2 kg)
Hepa filter holder		SH200 (4 kg)
Active charcoal filter for organic vapors		ORG200 (11 kg)
Active charcoal filter for corrosive and organic vapors		CORG201 (12 kg)
Active charcoal filter for formaldehyde vapors		FOR200 (12 kg)
Active charcoal filter for ammonia vapors		AMM200 (12 kg)
Additional accessories		
Containment sump + HPL work-top		BB06 (10 kg)
Containment sump + Tempered glass work-top		BV06 (15 kg)
Integrated outdoor light		LUMI (1 kg)
Tubular table on 4 feet		TTF06 (9 kg)
Tubular roller table (on castors)		TTR06 (10 kg)
Monobloc rolling table with storage shelf		TR06 (28 kg)
Table / trolley cabinet		TA06 (32 kg)

The manufacturer reserves the right to discontinue or change specifications or designs at any time without notice and without incurring obligations. 09/2017

Flammable cabinets

Corrosive cabinets

Toxic cabinets and multirisk

Pesticide range

Fume hoods, filtering cabinets - Ventilation

Containment and Cans

Anti-fire equipments and File cabinets

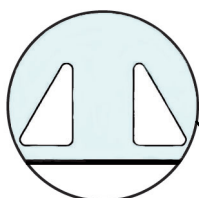
Showers and first-aid equipments

RANGE H

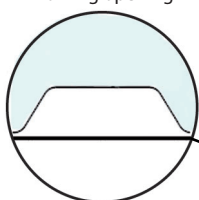
NF X 15-211 class 2



Labopur® 900 mm



To choose 2 hands working opening



To choose Trapeze working opening

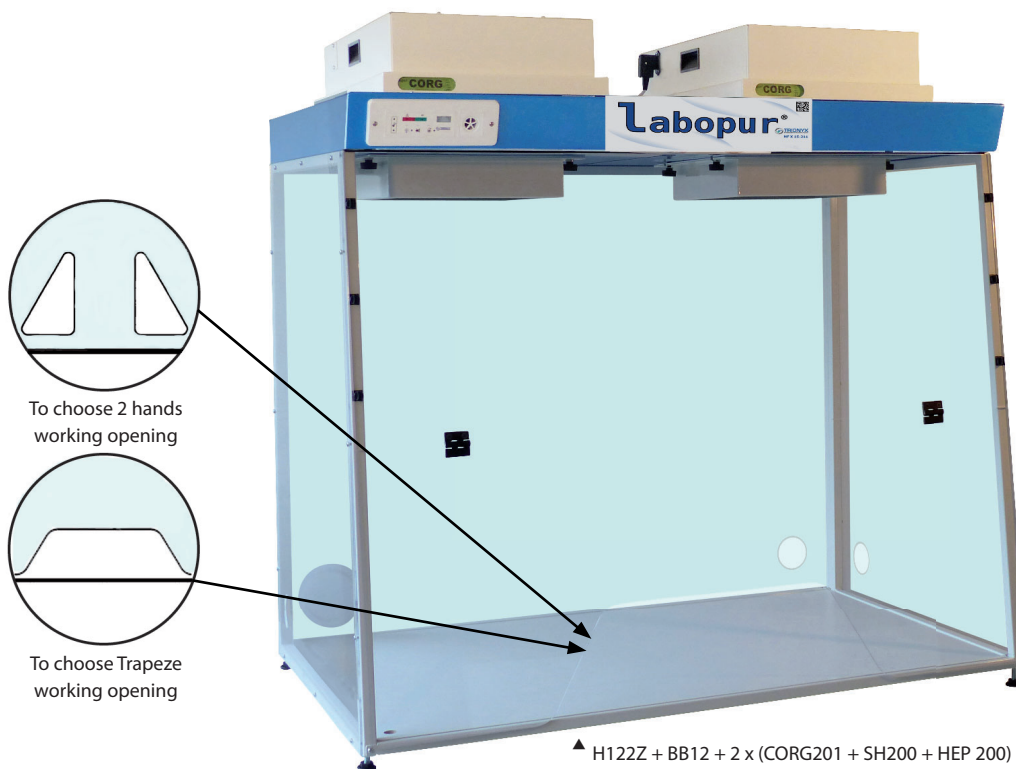


▲ H092Z + BB09 + 2 x (CORG201 + SH200 + HEP200)

Fume Hood without bottom work-top to equip, see accessories	H09		
External dimensions (H x W x D in mm)	1160 x 900 x 750		
Internal dimensions (H x W x D in mm)	935 x 845 x 700		
Weight (kg)	34		
Number of filter module / fan	1	2	
Working opening type	2 hands	2 hands	Trapeze
Référence	H091D	H092D	H092Z
For chemical use only			
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM200 (24 kg)	
For powder use only			
H14 Hepa filter(s)	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Ventilation element(s) (required for use of powder only)	CAR200 (2 kg)	2 x CAR200 (4 kg)	
For powder and chemical use			
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Active charcoal filter(s) for ammonia vapors	AMM200 (12 kg)	2 x AMM200 (24 kg)	
Additional accessories			
Containment sump + HPL work-top	BB09 (11 kg)		
Containment sump + Tempered glass work-top	BV09 (16 kg)		
Integrated outdoor light	LUMI (1 kg)		
Tubular table on 4 feet	TTF09 (12 kg)		
Tubular roller table (on castors)	TTR09 (13 kg)		
Monobloc rolling table with storage shelf	TR09 (37 kg)		
Table / trolley cabinet	TA09 (43 kg)		



Labopur® 1200 mm



▲ H122Z + BB12 + 2 x (CORG201 + SH200 + HEP 200)

Fume Hood without bottom work-top to equip, see accessories	H12		
External dimensions (H x W x D in mm)	1160 x 1200 x 750		
Internal dimensions (H x W x D in mm)	935 x 1145 x 700		
Weight (kg)	44		
Number of filter module / Fan	1	2	
Working opening type	2 hands	2 hands	Trapeze
Référence	H121D	H122D	H122Z
For chemical use only			
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM200 (24 kg)	
For powder use only			
H14 Hepa filter(s)	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Ventilation element(s) (required for use of powder only)	CAR200 (2 kg)	2 x CAR200 (4 kg)	
For powder and chemical use			
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Active charcoal filter(s) for ammonia vapors	AMM200 (12 kg)	2 x AMM200 (24 kg)	
Additional accessories			
Containment sump + HPL work-top	BB12 (12 kg)		
Containment sump + Tempered glass work-top	BV12 (17 kg)		
Integrated outdoor light	LUMI (1 kg)		
Tubular table on 4 feet	TTF12 (22 kg)		
Tubular roller table (on castors)	TTR12 (23 kg)		
Monobloc rolling table with storage shelf	TR12 (51 kg)		
Table / trolley cabinet	TA12 (54 kg)		

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Flammable cabinets

Corrosive cabinets

Toxic cabinets and multirisk

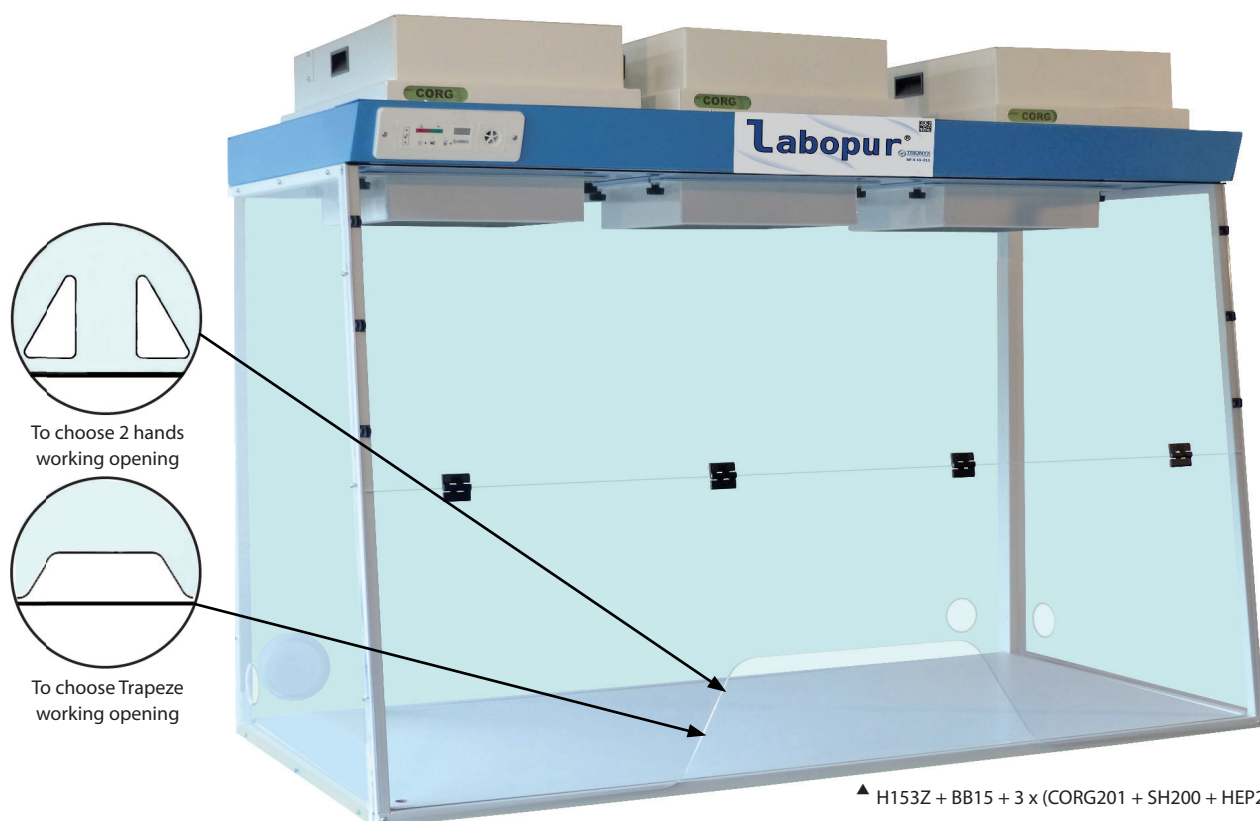
Pesticide range

Fume hoods, filtering cabinets - Ventilation

Containment and Cans

Anti-fire equipments and File cabinets

Showers and first-aid equipments

RANGE H**NF** X 15-211 classe 2**Labopur® 1500 mm**

Fume Hood without bottom work-top to equip, see accessories	H15				
External dimensions (H x W x D in mm)	1160 x 1500 x 750				
Internal dimensions (H x W x D in mm)	935 x 1445 x 700				
Weight (kg)	54				
Number of filter module / Fan	2		3		
Working opening type	2 hands	Trapeze	2 hands	Trapeze	Large width trapeze
Reference	H152D	H152Z	H153D	H153Z	H153G
For chemical use only					
Active charcoal filter(s) for organic vapors	2 x ORG200 (22 kg)		3 x ORG200 (33 kg)		
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG201 (24 kg)		3 x CORG201 (36 kg)		
Active charcoal filter(s) for formaldehyde vapors	2 x FOR200 (24 kg)		3 x FOR200 (36 kg)		
Active charcoal filter(s) for ammonia vapors	2 x AMM200 (24 kg)		3 x AMM200 (36 kg)		
For powder use only					
H14 Hepa filter(s)	2 x HEP200 (4 kg)		3 x HEP200 (6 kg)		
Hepa filter holder	2 x SH200 (8 kg)		3 x SH200 (12 kg)		
Ventilation element(s) (required for use of powder only)	2 x CAR200 (4 kg)		3 x CAR200 (6 kg)		
For powder and chemical use					
H14 Hepa filter(s) for powder handling	2 x HEP200 (4 kg)		3 x HEP200 (6 kg)		
Hepa filter holder	2 x SH200 (8 kg)		3 x SH200 (12 kg)		
Active charcoal filter(s) for organic vapors	2 x ORG200 (22 kg)		3 x ORG200 (33 kg)		
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG201 (24 kg)		3 x CORG201 (36 kg)		
Active charcoal filter(s) for formaldehyde vapors	2 x FOR200 (24 kg)		3 x FOR200 (36 kg)		
Active charcoal filter(s) for ammonia vapors	2 x AMM200 (24 kg)		3 x AMM200 (36 kg)		
Additional accessories					
Containment sump + HPL work-top	BB15 (13 kg)				
Containment sump + Tempered glass work-top	BV15 (18 kg)				
Integrated light	2 x LUMI (1 kg)				
Tubular table on 4 feet	TR15 (66kg)				
Tubular roller table (on castors)	TA15 (61 kg)				



Labopur® TABLE / TROLLEY CABINET

TABLE/TROLLEY CABINET ►

- Made of steel 15/10th; White epoxy paint RAL 9010.
- 1 adjustable shelf.
- 1 removable base trough on the bottom.
- Self closing wing doors with handles and lock.
- Large warning labels.
- 4 swivel castors (2 with locking).

Reference	Dimensions H ⁽¹⁾ x W x D (mm)	Weight (kg)	Storage (L)	Retention (L)
TA06	800 x 615 x 660	32	48	13
TA09	800 x 915 x 810	43	120	28
TA12	800 x 1215 x 810	54	156	38
TA15	800 x 1515 x 810	61	192	48



▲ TA06



▲ TR09

◀ TROLLEY

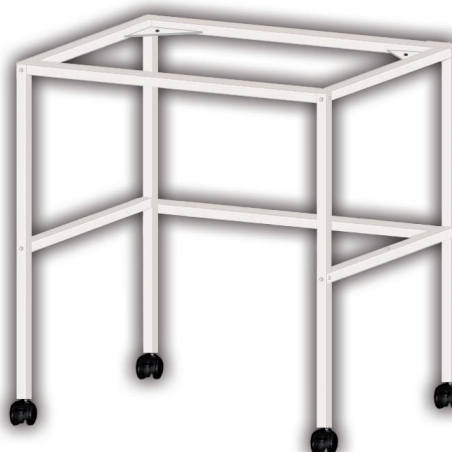
- Made of steel 15/10th
- White epoxy paint RAL 9010.
- 1 adjustable shelf (the depth of shelf is equal to ¾ of the depth of trolley).
- 4 swivel castors (2 with locking).

Reference	Dimensions H ⁽¹⁾ x W x D (mm)	Weight (kg)	Storage (L)
TR06	800 x 615 x 637	28	72
TR09	800 x 915 x 787	37	160
TR12	800 x 1215 x 787	51	208
TR15	800 x 1515 x 787	66	256

TUBULAR TABLE/TROLLEY ►

- Made of steel 15/10th; White epoxy paint RAL 9010.
- Available with feet or with 4 swivel castors (2 with locking).

Reference	Type	Dimensions H x L x P (mm)	Weight (kg)
TTF06	With feet	815 x 605 x 605	11
TTR06	With castors	800 x 675 x 685	12
TTF09	With feet	820 x 975 x 840	13
TTR09	With castors	800 x 975 x 840	14
TTF12	With feet	820 x 1275 x 840	14
TTR12	With castors	800 x 1275 x 840	15
TTF15	With feet	820 x 1575 x 840	16
TTR15	With castors	800 x 1575 x 840	17



▲ TTR09

(1) Height with wheels (caster height: 70 mm)

RANGE H

FUME HOODS WITH EXTERNAL CONNECTION



♣ BH09D + BB09



♣ BH15Z + BB15
+ Ventilation Box CDV-A
+ 2 KRC Connecting Kits for Box

USE

These Fume Hoods are intended to be connected to an exhausting system (1) for the discharge of toxic and harmful vapors to the outside of the building (use without active charcoal filter). It is imperative to add a ventilation box - model CDV-A (to be completed with 2 connection kits reference KRC or to be connected to an adapted exhausting system).

ADVANTAGES

- Fume Hoods delivered ready to use (no assembly), to be connected only to the electrical network and to an exhausting system.
- Transparent walls on all sides offering optimal illumination on the work top and immediate visualization of the products handled.
- Ergonomic hand traps for safe and easy handling in the enclosure.
- Lids allowing the introduction of cables for power supply of equipment and fluids inside the ductless fume hood

TECHNICAL SPECIFICATIONS

- Steel construction 15 / 10th.
- White epoxy paint RAL 9010, high resistance against chemicals.
- Glass walls made of PMMA.
- 4 caps for power cable
- Transparent rear wall

ADDITIONAL ACCESSORIES

- Ventilation Box
- Connecting Kit KRC
- Melamine work top
- Tempered glass work top
- Retention tank
- Integrated outdoor light
- Fixed and rolling tables

Ventilation and Filtration Boxes

To protect the users health and to improve the life cycle of your safety cabinet, we recommend to install an exhausting system. Do not hesitate to contact-us for more information.



Fume Hood without bottom to equip, see accessories	BH06		BH09		BH12		BH15		
External dimensions (H x W x D mm)	745 x 600 x 650		945 x 900 x 750		945 x 1200 x 750		945 x 1500 x 750		
Internal dimensions (H x W x D mm)	735 x 545 x 505		935 x 845 x 700		935 x 1145 x 700		935 x 1445 x 700		
Weight (kg)	23		34		44		54		
Hand traps type	2 hands	Trapeze	2 hands	Trapeze	2 hands	Trapeze	2 hands	Trapeze	Large Width
Reference	BH06D	BH06Z	BH09D	BH09Z	BH12D	BH12Z	BH15D	BH15Z	BH15G
Additional accessories									
Containment sump + Melamine work top	BB06 (10 kg)		BB09 (11 kg)		BB12 (12 kg)		BB15 (13 kg)		
Containment sump + Tempered glass work top	BV06 (15 kg)		BV09 (16 kg)		BV12 (17 kg)		BV15 (18 kg)		
Ventilation Box	CDV-A (8 kg)								
Connecting Kit	2 x KRC (2 kg)								
Outdoor light	LUD (Outdoor light with baffle - to be positioned on the left)								

(1) Models with an external connection do not conform to NF X 15-211 - (05/2009).

RANGE H**NF** X 15-211 class 2

DUCTLESS FUME HOOD AND STORAGE CABINET WITH RECIRCULATING AIR: PMSF

Use and store your chemicals at the same place

The storage cabinet is connected to the fume hood in order to **extract** and purify the fumes from both items. Thus, **the vapors** of the cabinet and the fume hood are **purified** while being pulled through the active charcoal filter, then **rejected into the atmosphere**.

The PMSF Workstation includes :

1. A DUCTLESS FUME HOOD

Tested and approved by an independent laboratory according to the new NF X 15-211 – may 2009 – Class 2 norm

Depending on the dimensions of the fume hoods, you will find different configurations in terms of number of engines and type of hand traps.

Each reference corresponds to one specific configuration.

2. AN ACTIVE CHARCOAL FILTER

To be determined according to the chemicals handled under the hood (mandatory).

- Filter «ORG200» for organic vapors
- Multi-purpose filter «CORG201» for organic and corrosive vapors
- Filter «FOR200» for formaldehyde vapors
- Filter «AMM200» for ammonia vapors

We remind you that we can offer filters for specific applications. Please contact us for further details. There can be several filters based on the number of fan in the ductless fume hood.

(1 fan = 1 filter).



PMSF: H061Z + TA06 + BB06 + CORG201 + SH200 + HEP200 + KRPMSE

3. ADDITIONAL ACCESSORIES

To add to the ductless fume hood

Mandatory: The fume hoods are bottomless, and have to be equipped with Containment sump + Melamine work top or Tempered glass work top.

The reference is determined according to the chosen fume hood and the necessary work top.

Optional: We also offer an external integrated light. Depending on the configuration chosen, there may be 1 or 2 LED lights.

4. A TABLE/TROLLEY STORAGE CABINET

- Built in steel 15/10th.
- White epoxy paint RAL 9010.
- Self closing wing doors with handles and locks.
- Large warning labels in compliance with ISO 3864, NFX 08.003 norms and the European directive 92/58/CEE.
- 1 adjustable shelf.
- 1 removable retention tank on the bottom.
- 4 swivel castors (2 with locking).
- High and low vents (high outlet connected to the fume hood)
- KRPMSE connection kit for connecting the cabinet to the hood.

The table / cabinet reference must be chosen according to the selected hood.



PMSF: H061Z + TA06 + BB06 + CORG201 + SH200 + HEP200 + KRPMSE

Lastly, you must have a hood reference + a filter reference + one or more accessory reference (s) + a table / safety cabinet reference + the KRPMSE connecting kit.

The manufacturer reserves the right to discontinue or change specifications or designs at any time without notice and without incurring obligations. 05/2017

Flammable cabinets

Corrosive cabinets

Toxic cabinets and multirisk

Pesticide range

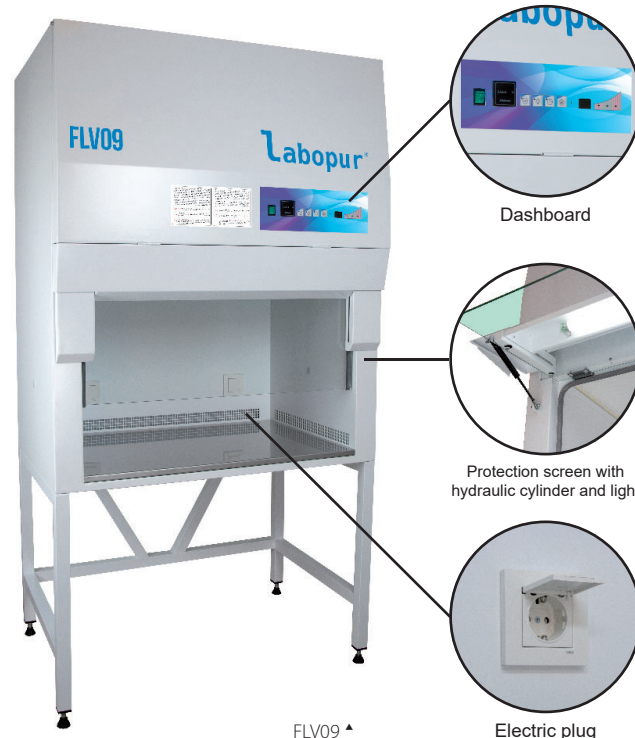
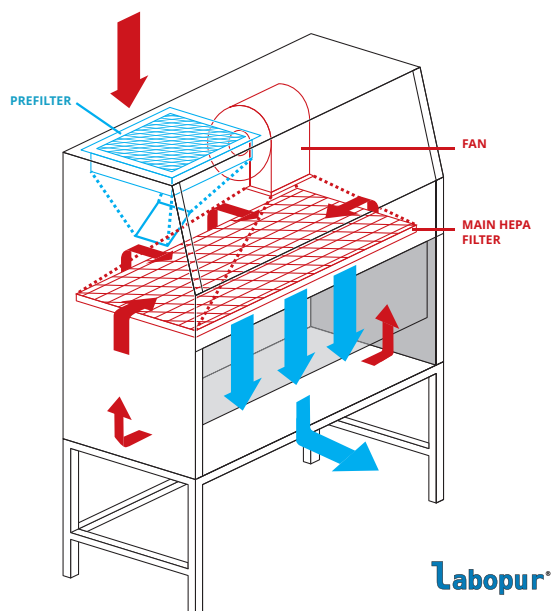
Fume hoods, filtering cabinets - Ventilation

Containment and Cans

Anti-fire equipments and File cabinets

Showers and first-aid equipments

VERTICAL LAMINAR FLOW HOODS



Dashboard

Protection screen with hydraulic cylinder and light

Electric plug

FLV09 ▲

INTRODUCTION

Providing first-class protection for the product, vertical laminar flow hoods are the instruments of choice when it comes to handling non-pathogenic biological samples, cell cultures and tissues, in the pharmaceutical, electronic, optical and food. The airflow is automatically maintained at 0.40 m / s.

NORMS

- European Directive 2007/47 / EC relating to medical devices.
- European Directive 2006/95 / EC relating to electrical equipment.
- European Directive 93/98 / CE relating to CE marking.
- European Directive 92/31 / EC and 2004/108 / EC relating to electromagnetic compatibility.
- Standards EN 61010-1, EN 61326-1, EN 61000-6-3.

ADVANTAGES

- Low noise fan and high intensity of light
- Smooth walls, rounded corners and no welds ; allowing easy cleaning and decontamination
- White walls for a glare-free brightness
- Easy replacement of filters
- For short periods between uses, the airflow can be set to medium speed, thus increasing the life of the filters and

reducing the time to reach the conditions of a clean room in only 3 to 4 minutes.

TECHNICAL SPECIFICATIONS

- Microprocessor control system with digital display for airflow velocity
- G14 pre-filter with 85% efficiency for particles > 0.5µm and HEPA H14 filter with 99.999% efficiency for particles ≥ 0.3µm
- System of automatic compensation of the air flow, to avoid the clogging of the filters
- Audible and visual alarm in case of airflow defect
- Cold-rolled steel sheet hood and electrostatic powder
- Work-top one piece, 304 stainless steel
- 2 outlets (2.5 A)
- Low voltage integrated lighting and > 800 lux - 30W
- Noise level below 60 dB (A)
- Power supply: 230 V, 50 Hz
- Consumption: 760 Watts
- Engine flow: 2.150 m³ / h
- 30% of the air is expelled from the HEPA exhaust filter and the remaining 70% of the HEPA filtered air is recycled through the slots on the sides and rear of the working chamber.

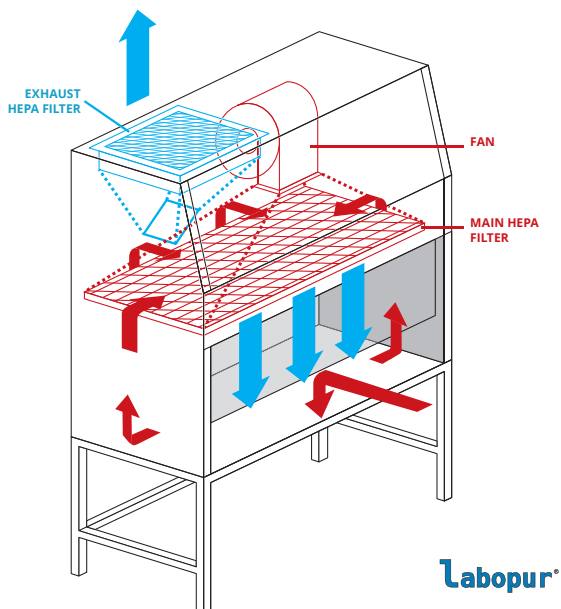
References	FLV09	FLV12
Outside dimensions (H x W x D) in mm	1345 x 1060 x 795	1345 x 1360 x 795
Inside dimensions (H x W x D) in mm	620 x 890 x 630	620 x 1195 x 630
Opening dimensions (H x L) in mm	200 x 888	200 x 1190
Work surface dimensions (L x P) in mm	885 x 630	1190 x 630
Shipping dimensions (H x W x D) in mm	1500 x 1150 x 850	1500 x 1450 x 850
Net weight (kg)	165	185
Raw weight (kg)	190	218

OPTIONS

Replacement HEPA filter - Replacement pre-filter - Front wall with UV lamp (FLV09 : Length of 45 cm, power of 30W and wave length 254 nm - FLV12 : Length of 90 cm, power of 30W and wave length 254 nm) - Tubular stand - Gas tap - Vacuum valve.



MICROBIOLOGICAL SECURITY POSTS - CLASS II



PSM12 ▲

Electric plug

INTRODUCTION

Providing first-class protection for the operator, the environment and the product, Class II microbiological safety cabinets are the instruments of choice when it comes to handling dangerous microorganisms. The airflow is automatically maintained at 0.45m / s.

NORMS

- European Directive 2007/47 / EC relating to medical devices.
- European Directive 2006/95 / EC relating to electrical equipment.
- European Directive 93/98 / CE relating to CE marking.
- European Directive 92/31 / EC and 2004/108 / EC relating to electromagnetic compatibility.
- Certified EN 12469

ADVANTAGES

- Low noise fan and high intensity of light
- Smooth walls, rounded corners and no welds; allowing easy cleaning and decontamination
- White walls for a glare-free brightness
- Ergonomic armrest for long periods of handling
- Electronic compartment located outside the contaminated area
- Easy replacement of HEPA filters

TECHNICAL SPECIFICATIONS

- Microprocessor control system with digital display for airflow velocity
- Two HEPA H14 filters with 99.999% efficiency for particles of $\geq 0.3\mu\text{m}$
- System of automatic compensation of the air flow, to avoid the clogging of the filters
- On-off switch with lock
- Alarms for: power failure, control system failure, open window, low and high airflow velocity, filters clogged
- Airtight seal thanks to a cylinder on the window
- Cold-rolled sheet steel station, epoxy polyester paint 2 mm
- Removable work-top in 3 parts, in 304 stainless steel
- 2 outlets (2.5 A)
- Low voltage integrated lighting and > 1,000 lux - 55W
- Noise level below 60 dB (A)
- Power supply: 230 V, 50 Hz
- Consumption: 1,860 Watts
- 30% of the air in the work area is expelled from the HEPA exhaust filter and the remaining 70% of the HEPA filtered air is recycled through the work area. This cycle repeats continuously

References	PSM12
Outside dimensions (H x W x D) in mm	1400 x 1360 x 795
Inside dimensions (H x W x D) in mm	650 x 1190 x 600
Opening dimensions (H x L) in mm	185 x 1190
Work surface dimensions (L x P) in mm	1190 x 600
Shipping dimensions (H x W x D) in mm	1540 x 1450 x 850
Net weight (kg)	220
Raw weight (kg)	257

Other model PSM9 on request.

OPTIONS

Main replacement HEPA filters and front exhaust wall with UV lamp (PSM9 : Length of 45 cm, power of 15W and wave length of 254 nm - PSM12 : Length of 90 cm, power of 30W and wave length of 254 nm) - Tubular stand - Gas tap - Vacuum valve.

The manufacturer reserves the right to discontinue or change specifications or designs at any time without notice and without incurring obligations. 02/2020

Flammable
cabinets

Corrosive
cabinets

Toxic cabinets
and multirisk

Pesticide
range

Fume hoods, filtering
cabinets - Ventilation

Containment
and Cans

Anti-fire equipments
and File cabinets

Showers and first-
aid equipments

RANGE H**NF X 15-211 Class 2**

Labopur® - MINI-DUCTLESS FUME HOOD



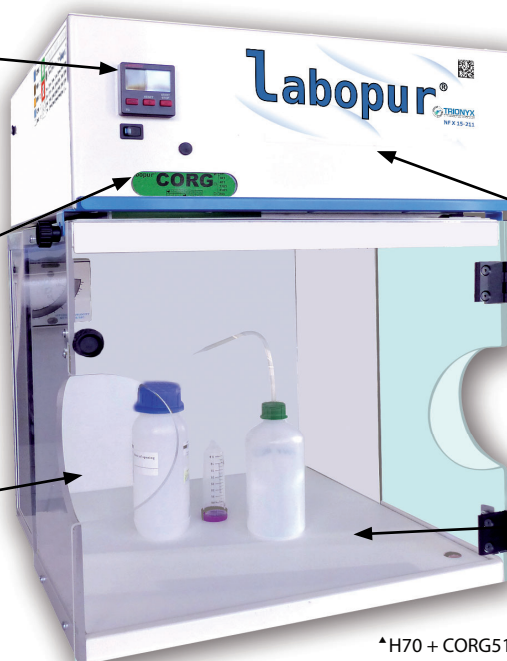
Timer



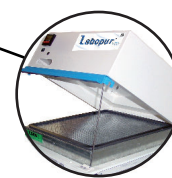
Control window



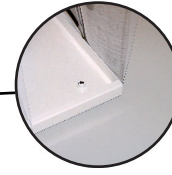
Hand traps



^H70 + CORG51



Easy replacement



Containment sump integrated

CONFORMITY

- Active charcoal filters adsorption's capacity and filtration system are tested and certified NF X 15-211.
- Electric fans are in conformity with European specification CE.

ADVANTAGES

- Labopur's technology.
- To place on a bench or on a workbench.
- Vapours are confined in the manipulation enclosure after being eliminated through the charcoal filter.
- Warning light insures a good functioning of the ventilation system.
- Front control window indicates immediately if the filter is inside and well adapted to your needs.
- High efficiency active charcoal filter specialized and treated following products stored in compliance with NF X 15-211.
- Dust-protecting pre-filter, efficiency 92% for particles > 3 µm.
- Easy replacement of the active charcoal filter.
- The standard timer supplied with your recycling air box indicates the total use of your box. After programming, every 60 hours, a sound alarm invites you to check the saturation of the active charcoal filter.
- Integrated base trough at the bottom to get back liquids in case of accidental droppings.
- No connecting evacuation, no civil engineering needed (if the hood is fitted with a filter).
- Our hoods are delivered ready to use (already mounted). All you have to do is plug them to a power supply device.
- Adjustable leveling feet for enhance stability.

TECHNICAL SPECIFICATIONS

- Made of steel 12/10th.
- Epoxy painting : white RAL 9010, blue RAL 5015.
- Soft and silent electrical fan: 220-240 volts - 27 watts, 0,1 A, 57 db (A) (excluding air flow) - Airflow 170 m³/hour.
- Wall sides made of PMMA, and ergonomic hand traps
- Fully opening swing front for full access inside the hood

OPTIONS

- **Active charcoal filter** : boxes are provided without active charcoal filter. You have to select one kind of filter in the boarding bellow, in as per the stored products.
- **Control of filter saturation level by REACTIVE TUBES**: Control port on the front of the box. Easy using of specialized reactive tubes. Using of manual pump for testing. Control of efficiency of the filter by reading color codes of reactive tubes.

We remind you that you can use filter for specific applications.

P/N	Description	Outside dim. H x W x D (mm)	Inside dim. H x L x P (mm)	Weight (kg)
H70	Mini-ductless fume hood (delivered without filter)	605 x 505 x 485	410 x 455 x 445	25
ORG50	Active charcoal filter for organic vapors	70 x 390 x 390	-	8
CORG51	Polyvalent ⁽¹⁾ active charcoal filter for corrosive and organic vapors	70 x 390 x 390	-	9
FOR50	Active charcoal filter for formaldehyde vapors	70 x 390 x 390	-	9
PMAF	Manual pump	-	-	0,4
TROR	Pack of 10 reactive tubes for organic tests	-	-	0,1
TRAC	Pack of 10 reactive tubes for corrosive tests	-	-	0,1
TROA	Pack of 5 reactive tubes for organic test and 5 reactive tubes for corrosive tests	-	-	0,1

⁽¹⁾ The latest generation « CORG » filter adsorbs a large majority of chemicals commonly used in laboratories : organic and inorganic acids, solvents and organics.