

LAMINAR FLOW BOOTH

SCOPE

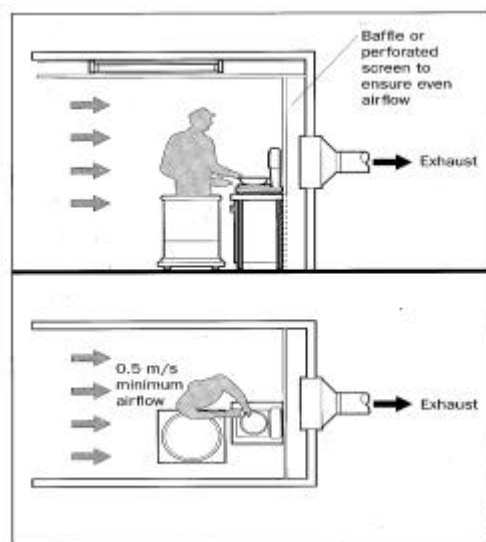
This control sheet is part of the ILO Chemical Control Toolkit. It should be used when the toolkit identifies that a control approach 2 using a laminar flow booth control solution is appropriate for your chemical(s) and task(s). The sheet gives good practice advice on using a laminar flow booth. It can be applied to many small-scale tasks e.g. weighing or mixing solids or liquids. The key points you need to follow to help reduce exposure to an adequate level are described. It is important that all the points are followed. Air cleaning equipment may be necessary before discharging exhaust air to the atmosphere. This sheet identifies the minimum standards you need to apply to protect your health. It should not be used to justify a lower standard of control than that which may be required for process control or control of other risks.

ACCESS

- Keep unnecessary people away from the work area. Ensure that no one is working close by downwind.

DESIGN AND EQUIPMENT

- Ensure laminar flow booths are designed and installed to recognised standards.
- Air flow across the whole cross-section of the booth should be smooth and at least 0.5 metre per second.



- The designer/supplier/installer should provide proof that the booth meets the required specifications and standards.
- Ensure that the booth is large enough to comfortably contain the equipment and materials needed for the task.
- Provide good lighting. It should be suitable for the materials handled i.e. dust tight or flameproof.
- Site the booth away from doors, windows, and walkways to stop draughts interfering with the ventilation.
- Have an air supply coming into the workroom to replace extracted air. Air inlets should be opposite the exhaust

ventilation so air moves across the work area.

- Work 'side-on' to reduce turbulence and hence exposure.
- Discharge extracted air to a safe place away from doors, windows and air inlets. Be careful that extracted air does not affect neighbours.

- Provide an easy way of checking the extraction is working e.g. manometer, pressure gauge or ribbon strips.
- Don't store material or other items in the booth.

EXAMINATION, TESTING AND MAINTENANCE

- Get information on the design performance of the booth from the supplier. Keep this information to compare with future test results.
- Check that the extraction system is working every day when it is switched on.
- Visually check the booth at least once a week for signs of damage, and repair when necessary.
- Have the booth thoroughly examined and tested at least once a year.
- Maintain the booth as advised by the supplier/installer, in effective and efficient working order.
- Do not use the booth if you have any suspicion that it is not working properly.

CLEANING AND HOUSEKEEPING

- Only keep the amount of material in the booth that will be used for the task.
- Clean the booth and work area daily.
- Spills are the major cause of dust or vapour in the workplace. Clean up all spills immediately.
- Don't clean up dusts with a brush or compressed air. Use a damp cloth or vacuum.
- Put lids on containers immediately after use.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Chemicals in hazard group **S** can damage the skin or eyes, or enter the body through the skin and harm you. Sheets Sk100 and Sk101 give good advice on how to keep the materials off your skin.
- Check the material safety data sheet or ask your supplier to find out what personal protective equipment is needed.
- Look after your protective equipment. When not in use, keep it clean and store it in a clean, safe place.
- Keep your protective equipment clean and change it at recommended intervals or when it is damaged.

TRAINING AND SUPERVISION

- Tell your workers about any harmful properties of the substances they are working with and why they must use the controls and PPE provided.
- Teach them to handle chemicals safely. Check controls are working and ensure that they know what to do if something goes wrong.
- Have a system to check that the precautions you have put in place are being followed.