THE FUTURE OF HAZARDOUS MATERIALS STORAGE
For the protection of employees, the development of hazardous vapours and explosive atmospheres must be avoided by permanently (24/7) connecting safety storage cabinets to a technical ventilation system. However, this measure is always associated with high energy consumption and is cost-intensive if three different special cabinets are purchased and permanently technically extracted for the sometimes small quantities of hazardous substances used. In addition to the cost of purchasing up to three different hazardous materials cabinets, these also take up valuable floor space when installed in the laboratory.

3 in 1
The new MULTIRISK cabinet can replace three conventional safety storage cabinets, saves space in the laboratory and significantly reduces the amount of technical exhaust air required for the safe storage of hazardous materials.

Space saving dimensions for optimal use of space
With a cabinet width of only 60 cm, the MULTIRISK cabinet offers a high storage capacity (per storage level 14 x 1-litre laboratory glass bottles or 4 x 2.5-litre and 3 x 1-litre laboratory glass bottles), as the cabinet with its depth of 86 cm makes perfect use of the available space next to laboratory fume cupboards.

High comfort
The manually operated vertical drawers offer an optimal overview of the stored hazardous materials in the entire cabinet. Thanks to specially designed drawer rails, they can be operated smoothly even when fully loaded. Both vertical drawers can even be opened at the same time. This creates the possibility for simultaneous operation by two people. The integrated soft-close feature additionally supports the manual closing process. For the necessary safety in case of fire, open vertical drawers are closed automatically.

Safe and sustainable
The ventilation concept of the MULTIRISK cabinet exceeds the requirements of EN 14470-1. Instead of extraction only above the bottom collecting sump, the exhaust air ducts positioned centrally on the rear wall of both vertical drawers ensures safe and uniform extraction on every storage level. In this way, the MULTIRISK cabinet offers optimum protection against hazardous vapours and explosive atmospheres. In addition, a wide variety of hazardous substances can be stored flexibly in both vertical drawers and on all storage levels.

The air exchange rate of the cabinet that has to be permanently ensured is also monitored in standard with the new safety assistance system. The monitoring system is preset ex works to the minimum required exhaust air volume and signals excessively low exhaust air volumes via a red LED display.

The on-site exhaust air system can thus be optimally adjusted to the required exhaust air volume. This permanently ensures safe and energy-efficient operation of the technical ventilation and saves costs for excessive exhaust air volumes in the long term. Furthermore, the system monitors that the vertical drawers are properly closed after use. Since only closed cabinets offer permanently optimal technical ventilation of the interior and ensure the best possible fire protection.

The visual signal of insufficient exhaust air volume and open vertical drawers can be forwarded to a central control centre via the integrated switch contact - this way, the permanently safe and energy-efficient operation of the technical ventilation can be monitored centrally, even for many cabinets at one location, and leads to long-term cost savings.
THE FUTURE OF HAZARDOUS MATERIALS STORAGE

The new MULTIRISK cabinet from asecos for the safe, flexible and energetically sustainable storage of various hazardous materials in just one cabinet

In everyday laboratory work, it is common to work with many different hazardous substances. For an efficient workflow, these are needed directly at the workplace. However, the quantity of hazardous materials required in the workplace is constantly decreasing due to optimised processes. Various types of safety storage cabinets have been purchased so far, adapted to the properties of the hazardous substances in use: a fire-resistant cabinet for flammable liquids, a special acid-alkali cabinet for corrosive substances and a separately lockable storage cabinet for toxic substances.

This results in three cabinets that are often only partially filled. This is not only space-consuming and inefficient, but also expensive to purchase and to operate!

In general, the user must decide within the framework of a risk assessment whether he is allowed to store certain hazardous substances together. If the joint storage is possible, there may be restrictions with previous safety storage cabinets due to their design. This may be due to a lack of fire protection according to EN 14470-1, insufficiently corrosion-resistant interior equipment or suboptimal exhaust air ducting.

By using one MULTIRISK cabinet – instead of three different special cabinets for the storage of hazardous materials – not only valuable laboratory space can be reclaimed. It also reduces the initial purchase costs and the permanent operating costs for technical ventilation. If hazardous substances are stored safely and directly at the workplace, this also saves time and thus personnel costs due to the short transport distances.
Fire resistant safety storage cabinets for the unrestricted storage of a variety of hazardous materials in work areas

1. The cabinet user is entirely unrestricted in deciding which types of hazardous materials are to be stored in the two storage compartments. Both vertical drawers can be used equally thanks to the ventilation concept and uniform interior equipment. The optionally available storage box can be conveniently opened via a sliding mechanism, locked separately and is thus ideally suited for toxic substances to be kept under lock and key.

2. The special, completely fire-resistant construction of the Type 90 MULTIRISK cabinet offers, for the first time, the possibility of fire-protected storage of corrosive and toxic hazardous substances. The cabinet thus not only ensures the safe storage of different hazardous materials in daily operations, but also provides maximum protection for users and rescue forces in case of a fire.

3. The choice of materials used for the interior of the cabinet, combined with the technical ventilation, provides the robust foundation for a long service life of the cabinet. Each storage level is equipped with an tray shelf made of chemical-resistant PE and can be adjusted tool-free in height at any time by the customer. The polyethylene trays are easy to remove, e.g. for cleaning or in case of leakage.

4. With a width of only 60 cm and a depth of 86 cm, the space-saving storage solution with high storage volume is optimally suited for installation next to fume cupboards.

5. To protect against unauthorised use, the cabinet can be securely locked. The integrated red/green indicator quickly shows the locking status. The cabinet can be integrated into existing locking systems by replacing the profile cylinder on site.

6. Hazardous material vapours are captured at each storage level within the cabinet and can be extracted directly via the integrated air ducts ready for connection (NW 75) to a technical exhaust system. The possible formation of explosive atmospheres or harmful vapours is safely prevented.

7. The minimum required exhaust air volume is monitored with the integrated safety assistance system – for permanently safe and energy-efficient operation of the technical ventilation.
- **Fire resistance of 90 minutes** (type 90), type-tested in accordance with EN 14470-1

- **GS-tested** (in accordance with ProdSG §21 Section 1 based on ZLS EK5/AK4)

- Conformity according to **EN 16121** and **DIN EN 16122**
  Requirements and test methods for safety, strength, durability and stability

- **Excellent products with special manufacturer warranty**
  - Extended manufacturer warranty of up to 10 years in combination with an asecos service tariff

* applied for

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**Do you have any questions or need further information?**
Our experts will gladly provide you with advice.
Please contact us via telephone +49 6051 9220-0 or by mail to info@asecos.com.