

## High Quality in the laboratory - a sign of quality [\[Image TuvSued\\_HighQuality\\_3D\\_dt.eps\]](#)

Laboratory equipment such as safety cabinets [\[Images CLASSIC\\_Stand\\_XL\\_prax\\_topview.eps & CLASSIC-XL\\_open.eps\]](#) have to satisfy high requirements in terms of industrial safety, health and environmental protection. Users, who additionally back a high degree of comfort and economy, are offered sound orientation by the High-Quality Seal of TÜV SÜD. It signals that the product characteristics go beyond the legal and standard requirements and that the product convinces with superior equipment, special user-friendliness and increased lifespan.

Safety for humans and the environment, permanent availability, low follow-up costs, high functionality and comfort - in a nutshell, these are the requirements of operators of laboratories and users of laboratory equipment with regard to safety cabinets for combustible liquids. Cabinet manufacturers, who carry top products of the industry, can signal this at a glance with the new High-Quality Seal of TÜV SÜD. That the products meet the legal requirements such as the Equipment and Product Safety Act (GPSG), DIN EN 14470-1 "Fire resistance-capable storage cabinets, Part 1: Safety cabinets for combustible liquids" as well as DIN EN 14727 "Laboratory furniture - cabinets and shelves for laboratories - requirements and test methods" is the basis for being awarded the seal. In all cases the product must have the GS test symbol [\[Image TuevSued\\_GS\\_4c.tif\]](#). The High-Quality Seal is only awarded if the product satisfies a standard that is specifically developed by the experts of TÜV SÜD Product Service. In addition, the testers of TÜV SÜD demand that the company concerned has implemented a quality management system. The "Classic " here is ISO 9001.

In the segment of safety cabinets, products by DÜPERTHAL Sicherheitstechnik GmbH & Co. KG based in Kleinostheim in the Bavarian Lower Franconia have obtained the High-Quality Seal for the first time. Prior to certification, the products were tested thoroughly by TÜV SÜD - in particular with regard to the following criteria which are also directly communicated to the user in the seal.

**Advanced design:** With this criterion the experts of TÜV SÜD Product Service ensure for example that the extraction of harmful vapours does not only take place above the floor pan but is effective at every cabinet level. [\[Image CLASSIC\\_airsystem.eps\]](#) Since safety cabinets weigh between 170 and 475 kilogram empty, there are also special requirements regarding the design of the cabinet legs. They have to be robust to withstand being handled by forklift trucks which are necessary for the transport of the safety cabinets. [\[Image PREM-XL\\_trans\\_Lprax.eps\]](#). In addition, the cabinet legs must be adjustable to allow for floor irregularities. The appropriate base is offset to the back in order to avoid knocking one's feet. [\[Image CLASSIC\\_M\\_base-loc\\_prax.eps\]](#) The automatic door closing system should operate in such a manner that vessels are not inadvertently knocked over when closing.

**User friendly:** If the user holds a canister with combustible liquid in one hand can he comfortably open the door(s) of the safety cabinet with the other hand? [\[Image CLASSIC\\_easydooropen.eps\]](#) Are the ventilation flaps designed so that their operating status is evident at any time? [\[Image CLASSIC\\_airsystem.eps\]](#) Are all controls designed ergonomically, for example the door handles provided at a comfortable handling level? [\[Image CLASSIC-XL\\_key\\_Lprax.eps\]](#) Is the automatic door closing system designed in a user-friendly manner? Is connection to earth according to BGR 132 possible? [\[Image PREM\\_earthing\\_01.eps\]](#) These are some of the questions answered in practical tests in the laboratory of TÜV SÜD Product Service. Another important requirement: the operating instructions for the safety cabinets have to be complete and easy to understand. Their purpose is to enable the user to safely handle the safety cabinet and its equipment from the start. The operating instructions must additionally reflect that a safety cabinet for combustible liquids is a piece of technical equipment.

**Increased service life:** With respect to the durability of safety cabinets the so-called laboratory furniture standard DIN EN 14727 makes some fundamental statements. Swing or folding doors as well as drawers, pull-out elements and pull-out tubs have to withstand 50,000 movement cycles (in and out) in all cases. The High-Quality Seal in this case demands 60,000 movement cycles. Corresponding live tests are carried out in the laboratories of TÜV SÜD Product Service.

Products that carry the High-Quality Seal exceed the standard requirements in every respect. In addition, the testing standard of TÜV SÜD Product Service has special requirements in terms of the processes in the producing company. Operation using a **Quality management system** is an obligation. The "Classic" here is ISO 9001, which, with the "continuous improvement process" as the heart, ensures continuous further development of products as well as of the organizational processes.

Once every six months the experts of TÜV SÜD satisfy themselves during a visit of manufacturing facilities that company and products permanently meet the high requirements of the High-Quality Seal. Among other things they check if goods receiving inspection takes place for the raw materials and appropriate documentation is carried out. They satisfy themselves that and which mechanisms come into force when defective supply parts and materials are received. In addition it is important that company employees work according to the latest state of the art and are able to (re)act systematically and independently if there are problems or defects. Further education schedules and relevant certifications for example are of interest here. The TÜV SÜD experts also ask for calibration certificates for measuring instruments. And, of course, they also have a good look at the outgoing goods inspection processes.

Particularly safe, particularly comfortable, particularly durable: companies wishing to obtain this quality seal for their products have to satisfy maximum requirements in many respects. For example no incidents whatsoever with the market supervision must have occurred in the past two years - much less any product call-backs taken place.

In addition, the TÜV SÜD experts research the respective market segment in detail. The High-Quality Seal is only awarded to products which in terms of quality move in the upper third of the market segment. Quality is not static - products are continuously further developed based on the market requirements. This fact is also taken into account by the test standard of TÜV SÜD Product Service. The equipment manufacturer names the product for which the so-called double octagon was awarded, the lot size - and the corresponding equipment numbers are kept at TÜV SÜD. In simple terms, the cards are reshuffled for the next lot.

No market entry without GS test symbol - exactly in accordance with this motto a safety cabinet always has to satisfy the GPSG, the DIN EN 14470-1 "Fire resistance-capable storage cabinets, Part 1: Safety cabinets for combustible liquids" as well as DIN EN 14727 "Laboratory furniture - cabinets and shelves for laboratories - requirements and testing methods". Anyone wishing to establish a sole position characteristic in the market and produces excellent products is able to document and communicate this with the High-Quality Seal. The double octagon presents the added value to the user at a glance. The manufacturer also has added value: additional improvement potential often results from the tests.

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### Possibly additional legends:

[\[Horst\\_Kristen.jpg\]](#)

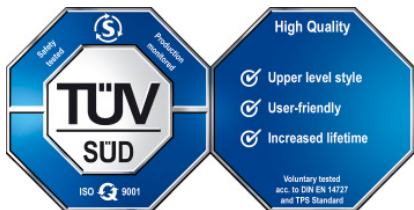


[\[Christian\\_Voelk.jpg\]](#)



[TuvSued\\_HighQuality\\_3D\\_dt.eps:](#)

DÜPERTHAL has obtained the "High-Quality Seal" as the first manufacturer of safety cabinets.



[TuevSued\\_GS\\_4c.tif:](#)

The mark for tested safety according to the Equipment and Product Safety Act (GPSG) and the guarantee that all criteria of the applicable standards such as DIN EN 14470-1 and DIN EN 14727 are satisfied.



[CLASSIC\\_Stand\\_XL\\_prax\\_topview.eps](#) & [CLASSIC-XL\\_open.eps:](#)

The cabinets of the CLASSIC line awarded the "High-Quality Seal" are used in the industry and in laboratories.



[CLASSIC\\_airsystem.eps:](#)

Ventilation at every cabinet level and visual verification possibility of the ventilation shut-off flaps.



[PREM-XL\\_trans\\_Lprax.eps:](#)

The safety cabinet is suitable for forklift truck use in the unladen state and can thus be used flexibly.



[CLASSIC\\_M\\_base-loc\\_prax.eps:](#)

The base is offset to the back to avoid knocking one's feet.



[CLASSIC\\_easydooropen.eps](#)

The doors can be easily opened and closed with one hand.



[PREM\\_earthing\\_01.eps](#)

The interior equipment is conductively connected with the potential equalisation strap to avoid ignition hazards according to BGR 132.



[CLASSIC-XL\\_key\\_Lprax.eps](#)

The locking cylinder is favourably integrated ergonomically at grip level.

