

Product family: Acid Safety Cabinets

Document name: TT Acid Cabinet

Control: GC 9-19-11

## [Acid Cabinet Compatibility - Is a Misnomer](#)

*The Blue Steel Acid Safety Cabinet are supplied with a chemical resistance paint which gives them resistance to incidental short term exposure to a variety of chemicals; if spills are promptly cleaned up. The steel found in any cabinet will corrode if proper laboratory hygiene protocol is not followed. With the proper laboratory hygiene these cabinets can last a very long time when storing the harshest of acid/corrosives.*

**Application Notes:** *The fumes of these acids/corrosives will condense predominantly on metal surfaces, when the fluid evaporates you are left with very concentrated residual of acid/corrosive. The metal in any cabinets we sell are vulnerable to these chemicals if containers are not stored sealed and if spills and residue are not cleaned up regularly. The room the cabinets are placed should maintain a low humidity and be well ventilated.*

*This “Industry Best Practice” is not only is important for the life of the cabinets but is also important to safely minimize these chemicals impact to the environment and to minimize the unsafe exposure of these chemicals to laboratory personnel.*

**Good Better Best:** *It is a misnomer that any Safety Cabinet is more or less compatible than another. As an example the nitric acid and phenol will soften plastics, the PE in Poly Cabinets are at risk, the laminate in Wood Acid is at risk as well as well as the paint used in our Metallic Safety Cabinets. Hydrochloric Acid and Sulfuric Acid can damage any of our cabinets if improperly handled. While the Chemcor® lining has some pretty good compatibility we still find the base steel can be attacked.*

*Our Acid Safety Cabinets are to keep organize the quantities of contained liquids allowed in a room/area. For those of our Acid Safety Cabinets with a sump, they act as secondary (short term) containment in the event of a leak of the primary containment vessel. The primary containment vessel is most of the time the packaging that the chemical manufacturer shipped the product in. Which, by the DOT standards have to be chemically compatible. Our customer’s responsibility is to clean up all residuals and to properly seal the container before returning it to the cabinet.*

*What makes an Acid Safety Cabinet good, better, best is the degree of hygiene/maintenance required to keep the cabinet looking good. On this basis good better best is generally as follows:*

*Good:            Metallic Safety Cabinet  
Better-3rd      Chemcor® Metallic Safety Cabinet  
Better-2nd:    Wood Laminate Cabinet  
Better-1st:     Rotocast Poly Cabinets  
Best:            Fabricated Poly Cabinets*

*But note; the priority(good better best) above is reversed based on economy. This mean the economy minded purchaser needs to pay more attention to hygiene.*

*On the other hand good better best changes, if you are required to meet NFPA 1. In regards to Hazardous Material Storage & the NFPA1; good better best generally changes to:*

*Better:           Metallic Safety Cabinet  
Best:             Chemcor® Lined Metallic Safety Cabinet*

*You most certainly could successfully store any acid in any Safety Cabinet with the proper degree of care. And we want to encourage that; because you see the definition of good better best changes. The message is; an Acid Safety Cabinet requires end user responsibility with proper maintenance no matter what Cabinet what Chemical. We need to stress that.*

**In conclusion:**

- 1) Touting Acid Safety Cabinets as compatible to certain chemicals can confuses our customers instead of helping them make the correct decision.*
- 2) Given the amount of sales there are on these cabinets vs. complaints it can be said that a majority of our customers already understand their responsibilities concerning hygiene and maintenance. All we need to do is reach those who do not understand.*