

The Fire Code of the City of New York Chapter 34 - Schools:

does state that the storage of dangerous chemicals, volatile flammable oils and liquids shall be confined to metal cabinets vented at top and bottom. A cardholder should be provided for a visible record of the contents and maximum amount stored therein; also a caution sign, if applicable to read: "In case of fire do not use water."

The storage of flammable organic solvents must be limited to 5 gallons (as per the New York City Fire Code -34) in Appendix E of the DOE's Science Safety Manual. Flammable solvents must be stored in an approved flammable storage cabinet, not a regular utility cabinet that complies with OSHA/PEOSH regulations and NYCFD requirements.

The purpose of a flammable storage cabinet is to prevent the contents from catching or exploding fire or exploding for at least 10 minutes in case of fire, in order to give personnel a chance to escape. Flammable storage cabinets should be properly capped (unless local regulations require venting).

National Fire Protection Association (NFPA 30, Chapter 4-3.2) states "The cabinet is not required to be vented for fire protection purposes; however the following shall apply:

- (a) If the cabinet is vented for whatever reasons, the cabinet shall be vented outdoors in such a manner that will not compromise the specified performance of the cabinet, as acceptable to the authority having jurisdiction.
- (b) If the cabinet is not vented, the vent opening shall be sealed with the bungs supplied with the cabinet or with bungs specified by the manufacturer of the cabinet."

If vented, NFPA 30 indicates these guidelines:

- * Remove both metal bungs and replace with flash arrestor screen (normally provided with cabinets). The top opening shall serve as the fresh air inlet.
- * Connect the bottom opening to an exhaust fan by a substantial metal tubing having an inside diameter no smaller than the vent. The tubing should be rigid steel.
- * Make sure the fan has a non-sparking blade and non-sparking shroud. It should exhaust directly to outside. The total run of exhaust duct should not exceed 25 feet.