

Catholic Mutual. . ."CARES"

SCHOOL SAFETY

PROCEDURES TO BETTER ORGANIZE SCHOOL CHEMICAL STORAGE AREAS

1. Inventory of the chemicals should be taken. It is impossible to know whether a problem exists until we have an accurate and current inventory of the various chemicals on hand. This inventory must be recorded and kept in a centralized location.
2. A decision must be made as to the substances that will be needed for the next two years. All other substances should be discarded in an appropriate and environmentally safe manner.
3. All remaining substances should be organized into their compatible chemical family. When you begin this reorganization process, you will need to estimate the shelf space percentages for each chemical family. To assist you in this process, the following guideline is a representative profile of a typical high school chemical storage area.

Inorganic Families

% of Shelf Space

Acids (inorganic 9)

Store away from all other items in a dedicated acid cabinet. Store nitric acid away from all other materials.

Metals, etc. (inorganic 1)

Less than 5%

Halides, Sulfates, Phosphates, Acetates, etc. (inorganic 2)

Approximately 35-40% of available shelf space. This is usually the largest family.

Nitrates, etc. (inorganic 3)

Approximately 8-10%

<u>Inorganic Families</u>	<u>% of Shelf Space</u>
Hydroxides, Oxides, etc. (inorganic 4)	Approximately 10%
Sulfides, etc. (inorganic 5)	Less than 1%
Chlorates, Perchlorates, etc. (inorganic 6)	5+%
Arsenates, etc. (inorganic 7)	Less than 1%
Borates, Chromates, etc. (inorganic 8)	Less than 1%
Sulfur, Phosphorus, etc. (inorganic 10)	Approximately 3%

4. Organic Families: Organic acids (organic 1) will probably occupy about 5+% of your organic shelf space except for acetic acid which should be stored with the inorganic acids (hydrochloric, etc.) in a dedicated acid cabinet. Keep acetic acid away from nitric acid. If your school is "typical", the remainder of your organic materials may occupy about 15-20% of your total shelf space. You should store all flammable organics in a dedicated flammables cabinet.
5. Other Materials: There may be some very large space consumers in 2 kilo (5 lb.) containers (i.e., calcium chloride, calcium hydroxide, etc.). You may wish to extend storage space in a separate location for such large volumes of packages.
6. You have now reorganized your Chemical Storage Area in such a manner that:
 - A. Compatible substances are stored together.
 - B. Acids have been separated and placed in dedicated storage.
 - C. Flammables have been separated and placed in dedicated storage.
 - D. Poisons have all been locked up.
 - E. An inventory has been taken and is recorded.
 - F. All excess materials have been discarded.