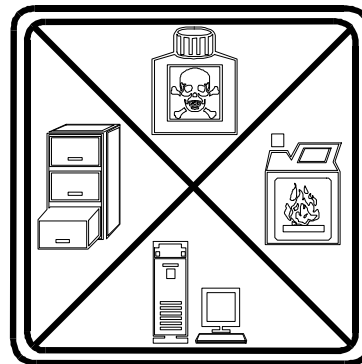


Chemical Management Guide



1.0 Ordering Chemicals and Chemical Products

1.1 POLICY. All chemicals and commercial products that are a mixture of chemical ingredients greater than or equal to 25 g/ml or the English equivalent used in a Natural Science Laboratory will be purchased through the Environmental Health and Safety (EHS) Coordinator in accordance with the ordering procedures listed below. Radioactive materials must be ordered through the Radiation Safety Officer (RSO).

1.2 DEFINITION. Chemicals and commercial products include but are not limited to the following: amino acids, proteins, reagents, dyes, buffers, preservatives, solvents, filtering and absorption media, cleaning agents, disinfectants, detergents, indicators, aerosols, metals, adhesives, drying agents, herbicides, and pesticides. This includes commercial products that are purchased from local retailers.

1.3 EXCEPTIONS. The only exceptions at this time are the following: gas cylinders, cryogenic liquids, restriction enzymes, DNA, vacuum pump oil, thermometers, and quantities less than 25 g/ml or the English equivalent. Items shipped on dry ice or that require special storage should be delivered directly to the user. The EHS Office does not have the facilities store this material. Users may purchase products directly from local retailers provided that the EHS Coordinator is notified of the purchase.

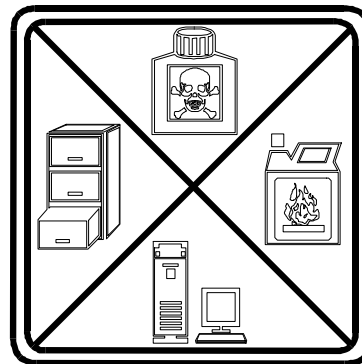
1.4 GOALS. The goals of our Chemical Management System are the following:

1. To facilitate the physical inventory of our laboratory chemicals through centralization and the use of bar-coding technology,
2. To minimize chemical purchasing and waste disposal costs,
3. To ensure that the hazards associated with the chemicals and chemical products we import are properly identified and that the health and safety information is readily available and accessible, and ultimately
4. To provide and maintain a safe and healthy environment for students, faculty, staff, and visitors.

1.5 PROCEDURES. The following outlines the steps for ordering a chemical or commercial product for use in one of our laboratories:

1. Check your laboratory and department, the surplus chemical inventory, and the list of stocked items to be sure that the item you need is not already on site. Upon request the EHS Coordinator will query the chemical inventory database in an attempt to find the item or items you need.

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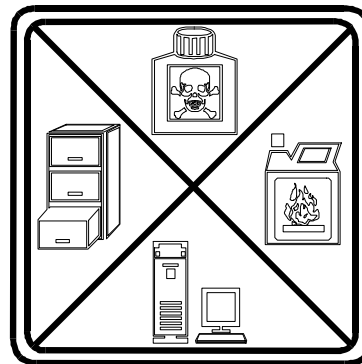
2. Initiate the order by filling out a Chemical Requisition Form (CRF). Forms are available in department offices or from the EHS Office.
 3. Mail, send, or bring the CRF (white and yellow copies) to the EHS Office, SB-4 McGregory.
- Or, you may wish to place your own order with the vendor by doing the following:
1. Obtain a PO# from the EHS Coordinator (not Purchasing) via telephone, voice mail, e-mail, or in person. You will need to indicate the vendor and specific items to be ordered.
 2. Specify that the order is to be delivered to Central Receiving, at the Maintenance Building; Attention: EHS Office.
 3. Send or bring the CRF to the EHS Office, SB-4 McGregory for initialing. This should be done in a timely manner as your received order will not be released from Central Receiving without a signed and initialed CFR. Item that are sent by overnight delivery can arrive at Central Receiving before your CRF arrives at the purchasing department if you delay in sending it the EHS Office.

1.6 DELIVERY OF ORDERS. The vendor will have your order delivered to Central Receiving who brings it to the EHS Office where it is unpacked and checked in. A bar-code label is placed on each container that contains more than 25 g/ml. The order will then delivered to your department office. Deliveries are made once per day during the academic year. At all other times, you will be notified by e-mail that your order has arrived and can be picked up at SB-3/4 McGregory. If you receive your order directly from Central Receiving or some other route, please notify the EHS Coordinator so that the containers can be tagged with barcode labels and entered into the chemical inventory.

1.7 INVENTORY LISTS. A current inventory of the surplus chemicals in the division stockroom and a list of stocked reagents and solvents will be distributed to chemical users three times per year (at the beginning of each semester and prior to the start of the summer research period). Items on the surplus chemicals list are available to users at little or no cost. Stocked items are new, unopened and can be purchased from the EHS Office at a lower price because of bulk discounting. If you need additional copies or have questions regarding the items listed, please contact the EHS Office. Inventories of individual laboratory rooms are also available (as they are completed) from the EHS Coordinator.

1.8 MATERIAL SAFETY DATA SHEETS (MSDSs). We are required to have a MSDS on file for each hazardous chemical or commercial chemical product that we purchase. MSDSs are summaries of the health, safety, and environmental information for a particular chemical or chemical mixture. MSDSs are produced by the manufacturer and are supposed to be sent along with the order, but are usually mailed separately. If you receive MSDSs directly, please send a copy to the EHS Office for inclusion in our master file.

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1.9 CONTINGENCIES. Arrangements will be made to provide service during long-term (greater than one day) absences of the EHS Coordinator. Each department will be notified of the alternate procedures for ordering and obtaining chemicals during these periods. Short-term deviations from the normal services will be posted on the door to SB-3 McGregory and on the EHS Office website at <http://offices.colgate.edu/chemmgt/>.

1.10 EMPTY CHEMICAL CONTAINERS. Please place all empty chemical containers in one of the blue recycling bins located in most of the laboratories. The empty containers are collected periodically and removed from the chemical inventory so that it's as up to date as possible.

2.0 Procedures for Obtaining Chemicals from the Division Stockroom

2.1 POLICY. Every attempt will be made to use existing surplus chemicals from the Division Stockroom rather than purchase "new" materials. Please return unwanted or unneeded chemicals to the stockroom in a timely manner so that they can be used by others. Credit will be given for chemicals in good condition.

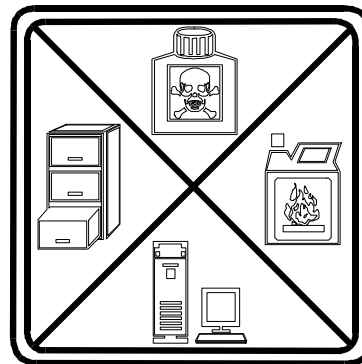
2.2 PROCEDURES. Chemicals may be obtained from the stockroom by one of the following methods:

1. Fill out a Chemical Requisition Form (CFR) with the name and barcode tag # or stock # of the desired chemical and mail the form to the EHS Office, SB-4 McGregory. The item(s) will be delivered to your department office.
2. E-mail dedwards with the following information: description and quantity of chemical desired, stock # or barcode tag # (if known), banner charge #, and the room # where chemical will be used and/or stored. The item(s) will be delivered to your department office.
3. Come to SB-3 McGregory during window hours and place your request in person. If you send a student, they must present a properly completed CRF.

2.3 CHEMICAL STOCKROOM WINDOW HOURS. Window hours will be from 9 a.m. to 10 a.m. and from 1:30 p.m. to 2:30 p.m. daily. Every effort will be made to minimize disruptions to this schedule. However, scheduling conflicts will occur. All short-term deviations from the set schedule will be posted at the window (SB-3 McGregory) and on the EHS Office website. Individuals may make appointments to cover special circumstances that may arise.

2.4 CONTINGENCIES. Department Chemical Hygiene Officers will have access to the chemical receiving room (SB-3 McGregory) and to the division stockrooms. If EHS Coordinator is unavailable during stockroom window hours, please coordinate your needs with your Department Chemical Hygiene Officer (DCHO).

Chemical Management Guide



<u>Department</u>	<u>DCHO</u>	<u>phone</u>	<u>e-mail</u>
biology	Robert Smith	7747	rjsmith
chemistry	Robert Pinney	7775	rpinney
geology	Dianne Keller	7893	dkeller
physics	Roger Williams	7654	rwilliams
psychology	Cindy Baker	7357	cbaker

2.5 SAFETY. Anyone obtaining chemicals from the stockroom is responsible for ensuring their safe transportation to the final destination. It may be necessary to use secondary containment or a cart. In addition, individuals must be wearing proper eye protection if they expect to obtain chemicals from the stockroom. Users must be prepared to handle and store all chemicals purchased for use in their laboratories. Anyone and everyone using hazardous chemicals must know the properties of the materials that they are using and the equipment and procedures necessary to minimize the risk to themselves and others. For more information on safety, please see our Chemical Hygiene Plan at <http://offices.colgate.edu/chemmgt/CHP/contents.htm>.

3.0 Helpful Hints

- Plan ahead - don't wait until the last minute to place an order.
- Monitor your student's progress.
- Check the surplus chemicals inventory and become familiar with the division's stocked items.
- Know what you have in your laboratory - If you don't need it, get rid of it.