

The Science Safety Snippets

Welcome to this month's edition of the Faculty of Science's Safety Snippets newsletter. This month focuses on Chemical Safety and the introduction of Monash's chemical management database-Chemwatch. Please direct all comments and feedback, including suggestions for articles particularly relevant to your area to the e-mail address below.

Dangerous Goods & Hazardous Substances:

Dangerous Goods are substances and articles classified on the basis of their immediate physical or chemical effects such as fire, explosion, corrosion, oxidation, spontaneous combustion or poisoning that can harm property, the environment and people. Hazardous substances are chemicals which can harm your health either via acute or chronic toxicity. Examples include (depending on the concentration and ingredients): acids, caustic substances, peroxides, cleaning agents, disinfectants and insecticides. It is possible that a chemical may be both a dangerous good and a hazardous substance however it is also possible that they may be one or the other. It is the responsibility of those who use chemicals to make themselves aware of the associated hazards. This can be done in a number of ways.

Managing chemicals safely at Monash

Controlling the risks associated with chemicals may seem a difficult task but as with all hazards a risk management approach is required to either eliminate or at least reduce the level of risk to staff, students and the environment.

Monash University's risk management program contains a specific section on chemicals and guidelines for the storage and labelling of Dangerous Goods & Hazardous Substances in workplaces have been developed. There is also 'Using Chemicals At Monash' which has been produced to explain the way Monash expects chemicals to be handled. As well as university documentation there are regulations and comprehensive guidelines about the safe handling and storage of chemicals provided through Worksafe.

<http://www.worksafe.vic.gov.au/>

Before any chemical is used in an experiment or everyday life, the MSDS should be consulted to determine any hazardous properties and suitable control measures including what to do in case of an emergency. According to legislation, an MSDS must be held for every chemical including cleaning products. MSDS's must be from the manufacturer and within 5 years of the issue date.

Unfortunately MSDS's are not available for by-products produced during the course of an experiment. This is where a risk assessment is vital and safe operating/handling procedures must be developed to encompass what general characteristics the mixture may have.

Further information on managing chemicals safely at Monash can be found at;

<http://www.adm.monash.edu.au/ohse/assets/docs/others/risk-control-program.pdf>

<http://www.adm.monash.edu.au/ohse/assets/docs/safety-topics/chemical-storage-guide.pdf>

<http://www.adm.monash.edu.au/ohse/assets/docs/others/usin-g-chemicals.pdf>

Chemwatch

Ensuring MSDS's are maintained and kept up to date in areas which can contain large numbers of chemicals is a daunting and time consuming task. To enable MSDS's to be effectively and efficiently managed, Monash has subscribed to an online MSDS database known as Chemwatch. The database is aimed at simplifying the ongoing collection and maintenance of MSDS's in the workplace and ensures that the University is compliant with the current legislation. The system is available now for viewing over 2 million MSDS's and can be accessed at <http://www.adm.monash.edu.au/ohse/safety-topics/chemical.html> by clicking on the Chemwatch icon;



Users can access the system from any Monash PC using their authentic username & password. However, the web browser must be able to accept "pop-ups" for the system to work. Chemical inventories from each area within the faculty where chemicals are used and stored are currently being progressively uploaded into the database which administrative users will be able to update on a real time basis. Chemwatch also has the added functions of being able to build chemical models, generate compliant labels for a variety of different sized containers and assess the general physical properties of chemical mixtures.

Anyone interested in finding out more about Chemwatch should contact the faculty's OHSE Consultant via the email address below.

Poisons & Carcinogens

In addition to requirements surrounding the use of dangerous goods and hazardous substances, specific requirements are in place for scheduled poisons and carcinogens (chemicals that cause cancer). Further information can be found at;

<http://www.adm.monash.edu.au/ohse/safety-topics/chemical.html> or by contacting the OHSE consultant.