

Safetyline 50

H & S UPDATE FEBRUARY 2005

The Health and Safety Laboratory (HSL) has recently published a review of **explosion hazards from nanopowders**. The report finds a considerable body of knowledge on the explosion characteristics of micron scale powders, and although the extrapolation of the data for the larger sized particles cannot be carried out with confidence due to the marked changes in chemical and physical properties of particles smaller than 100nm, there is good reason to expect that nanopowders can explode, and that further research is required to determine the explosion characteristics of representative nanopowders. The report can be found on www.hse.gov.uk/research/hsl_pdf/2004/hsl04-12.pdf

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*When **disposing of chemicals** in accordance with University Procedures, please don't bring them down to the Safety Services office on Victoria Street without first discussing this with Anne Willcox or Chris Peace. We have limited storage capacity at Victoria Street and can accept chemicals **with an appointment**, but often it is preferable to arrange collection from your department. Consignments must be labelled with their contents, department and contact name.*

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A local paper reports that a student in Crookesmoor escaped with only minor injuries when a **deodorant can exploded** in her bedroom blowing out a large window. It appears that the can was sited too near a fan heater being used to heat the bedroom, but as the temperature rose the butane and propane gas propellants, used in all aerosols, ignited causing the can to explode. This serves as a reminder to us all not to leave aerosol cans next to any kind of heater.

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*Road safety legislation adopted in Italy and Spain in 2004 is to be adopted by France and Germany in 2005. A high visibility waistcoat must be worn if leaving an immobilised vehicle on the carriageway at night or in poor visibility, even to set up warning triangles or to walk to an emergency phone. **Motorists driving on the continent** could face on-the-spot fines of up to 138 euros for non-compliance in the event of a breakdown.*

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The **Control of Substances Hazardous to Health (Amendment) Regulations 2004** was introduced on 23rd December 2004. This will see the introduction of single "**Workplace Exposure Limits**" (WEL) for substances hazardous to health, to replace the "Maximum Exposure Limit" (MEL) and "Occupational Exposure Standard" (OES) regime which has been in place since 1988. The Regulations also introduce requirements to observe "Principles of good practice" for the control of exposure to substances hazardous to health and the duty to review control measures beyond plant and equipment, including systems of work and supervision, at suitable intervals. The amending regulations to COSHH 2002, including the "principles of good practice", can be accessed at www.hmsa.gov.uk/si/si2004/20043386.htm. The 8 "**Principles of good practice**" are: -

1. Design and operate processes and activities to minimise emission, release and spread of substances hazardous to health.
2. Take into account all relevant routes of exposure - inhalation, skin absorption and ingestion - when developing control measures.
3. Control exposure by measures that are proportional to the health risk.
4. Choose the most effective and reliable control options which minimise the escape and spread of substances hazardous to health.
5. Where adequate control of exposure cannot be achieved by other means, provide, in combination with other controls, suitable personal protective equipment.
6. Check and review regularly all elements of control measures for their continuing effectiveness.
7. Inform and train all employees on the hazards and risks from the substances with which they work and the use of control measures developed to minimise the risks.
8. Ensure that the introduction of control measures does not increase the overall risk to health and safety.