SERC Health & Safety

Unsafe chargers

The Electrical Safety Council warns that millions of unsafe AC/DC plug-in chargers are being imported into the UK every year, mainly from China. These chargers are being sold, often through the internet, for use with mobile phones, games consoles, cameras and portable music players.

Following an incident where a child narrowly escaped electrocution, Buckinghamshire Trading Standards [1] looked at samples of 36 chargers obtained from a range of outlets. The results are alarming. Only branded products, 12 in all, complied with the regulations. As for the unbranded chargers, all 24 failed for reasons of poor internal construction. Moreover the plug pin-size and positioning on the unbranded chargers were not right, leading to a risk of overheating and fire when plugged into a 13 A socket-outlet.

The message we take from this is that branded chargers supplied by major manufacturers of electronic goods do generally conform to standards of safety, but unbranded chargers do not. Therefore do not buy cheap substitutes.

The photograph (Figure 1) shows an example of a branded charger, which we have no reason to believe is unsafe, with the range of markings to look out for. If a product has all of these, and we can generalise by extending this caution from chargers to consumer and laboratory equipment, then that is a good sign; if any of them was to be missing, then that tells you the product does not comply with standards.

The presence of markings does not guarantee probity – the markings might after all be faked – but the absence of markings is a sure sign that it is not up to standard.

Workplace first-aid changes

Why? After looking at first aid in the workplace the Health and Safety Executive (HSE) found that 'although first-aid awareness and penetration in workplaces was good, compliance was found to be more "in spirit" rather than the letter of the regulations and this exposed some important deficiencies in the format and content of guidance and in the proportionality of the current regulatory requirements for lower risk employees'.

What? 1. The current initial 4-day First Aid at Work (FAW) course will be shortened to three days.

- 2. There will be a new qualification of Emergency First Aider in the Workplace (EFAW) that will require a one-day training course.
- 3. At the end of the 3-year certification period, first aiders need to undertake an FAW requalification course, or EFAW course.
- 4. The FAW requalification remains unchanged at two days.
- 5. It is strongly recommended that FAW and EFAW first aiders attend an annual 3-hour refresher course to stop their skills fading.

When? The changes came into effect on 1 October 2009.

And so? Because of the changes employers should consider what's best for their circumstances in light of the hazards and risks in schools. These changes give the employer scope to train more staff in first aid if a school's history of accidents warrants it, albeit to the EFAW level only. They also should allow more to volunteer to become first aiders because the training to EFAW I evel is less onerous.

Further information

Information on first-aid training and qualifications can be downloaded from: www.hse.gov.uk/pubns/web41.pdf

'First aid at work' - http://www.hse.gov.uk/pubns/indg214.pdf - answers some basic questions about first-aid provision at work.



Figure 1 - Markings on a branded power supply.
The GS Mark shows that the product has been independently tested for conformance with safety standards.



CORGI bye-bye



On 1 April 2009, the Gas Safe Register took over the statutory gas registration scheme in Great Britain from CORGI. Both schemes protect the public against cowboy operators, but whereas CORGI represented the gas industry, and was mandated to protect the public by the HSE under gas safety legislation, the new scheme is run by an independent contractor working to a 10-year contract under the HSE.

What the public should get from this is greater assurance about the competence of registered gas engineers and the safety of gas supplies. This comes from inspections of work aimed at finding and reducing unsafe practices.

More details about the Gas Safe Register are to be found at this site: http://www.hse.gov.uk/gas/domestic/further-details.htm

Drinking water in labs

We have had some queries recently regarding whether teachers should allow students to drink water during science lessons.

This could have something to do with the media message that drinking water keeps us healthy [1]. Up to 60% of the human body is water and the brain is composed of about 70% water, (not to mention the lungs are nearly 90% water and about 83% of our blood is water). Industry groups such as the Natural Hydration Council [2] and suppliers of bottled water are constantly saying that your brain must be regularly replenished by copious amounts of it in order for it to function properly. As a result, students are being encouraged to drink water in classrooms and in some cases school laboratories.

SSERC appreciates the need for students to keep their bodies

hydrated. However, there are significant risks in allowing the practice of drinking in school laboratories. We recommend that the practice should not be allowed for the following reasons:

- a school science laboratory cannot be directly compared to a standard classroom. In science laboratories, hazardous materials are routinely used.
- accidental contamination can, and does, occur even when there is no practical work going on (can you always be sure that the previous class, who may have been involved in practical work, has cleaned the benches thoroughly?).

Although there is no direct legislation aimed at preventing students from drinking in school laboratories, it is accepted good practice **not to allow** anyone to eat or drink in a laboratory. This 'ban' on drinking in laboratories is also recommended by the Association for Science Education (ASE) and our sister organisation in England, CLEAPSS. If the decision was made to allow students to drink in laboratories and an incident occurred, it could prove very difficult to defend adopting a position which was contrary to accepted good practice.

If students are being allowed to carry water bottles in their school bags etc., we suggest that they be encouraged to have a drink before they enter the laboratory (or wait until they leave the laboratory). In cases where the students cannot wait for the lesson to end in order to have a drink, they should be allowed to wash their hands and leave the laboratory to have a drink.

References

- [1] http://www.yououghttodrinkmorewater.com/Why-Naturally-Sourced-Water/index.html
- [2] Natural Hydration Council http://www.naturalhydrationcouncil.org.uk/

New AV installation specification

The document title is PAS 122:2009 'Specification for the installation of audiovisual equipment in classrooms and general publicly accessible areas'. This Publicly Available Specification

(PAS) was sponsored by Becta and its development was carried out by the British Standards Institution (BSI). The standard costs £85 and is available from BSI.

PAS 122 is primarily a specification for employers and installers. Although most of it relates to whiteboards and projectors, its scope is intended to cover many other types of audio visual equipment.

http://www.bsigroup.com/Shop/PublicationDetail/?pid=0000000030154893

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