

You can always call us at Envirostore if you are confused. Radioactive materials are dangerous goods class 7.1 (low level). The 7.2 and 7.3 radioactives are beyond the scope of this article and are the serious radioactive items like plutonium and radium.

Explosive items we have encountered from schools include smoke machine generators, small rockets, touch powder, fireworks and the like. Explosives are dangerous goods class 1, with class 1.1 being the classic gelignite, TNT, nitro-glycerine and detonators etc. Fireworks are class 1.4, as are distress flares. We really can't condone these materials in schools, apart from perhaps sparklers, which are not explosives but flammable solids (class 4.1). Generating bangs and smoke in the class is a poor demonstration of chemistry in action; we subscribe to the old Maxwell Smart aphorism: chemical knowledge for goodness not evil. If you do have any of these items in your lab, they are effectively subdued, by dunking in water in a bucket for instance, prior to calling in the disposals man

Of course, there are some chemicals that may form explosive compounds over time. The best example is the formation of solid organic peroxides in certain solvents such as ethers or furans. Luckily, this is rare in schools because such solvents are no longer used. If you do have diethyl ether in your lab, you really should consider disposal as it is a troublesome solvent for any laboratory, let alone a school laboratory. If you are concerned or you would like to know more, please contact me. Ammonium

dichromate is said to become explosive when aged. Chlorates and perchlorates cannot be trusted to behave themselves, so we strongly suggest disposal. Formic acid (90%) over time breaks down and forms carbon monoxide, which has been said to break the bottle from pressure build up. It is only the 90% concentration that causes problems, so if you have some, you should routinely, gently vent the cap. If there is a noticeable 'psst' sound then maybe the formic has aged enough and you can either use it or lose it or dilute it (with water).

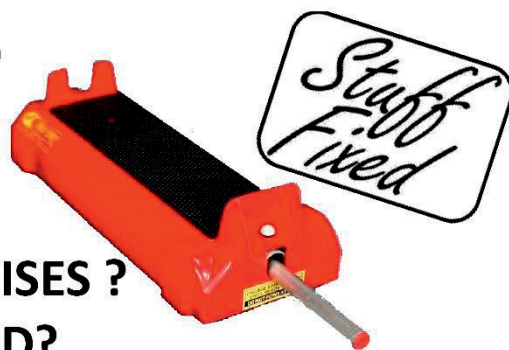
That's probably enough for now. Next article we will have a look at some of our favourite and least favourite chemicals. Future topics will include gas cylinders, best and worst habits and practices and whatever else we can think of between now and then. If anyone would like a particular topic mentioned or if there are any comments, even brutal and abusive, contact myself or Lablines Editor, Jessica Boys.

# PRINCIPLES and PRACTICE

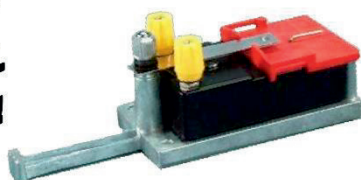
## FOR REPAIRS



IS IT SMOKING?  
IS IT SMELLING?  
IS IT MAKING BAD NOISES ?  
MAYBE IT IS JUST DEAD?



**WE REPAIR  
ANY BRAND, ANY MODEL  
AND NEARLY ANYTHING!**



**WHO YOU GONNA CALL?**

**TRY HARVEY ON: 0459 768 392**

**Or Email: [harvey@principlespractice.com.au](mailto:harvey@principlespractice.com.au)**