



## Anti-Bumping Granules

In [Safeguards in the School Laboratory](#) (11<sup>th</sup> edition), section 6.2 we state:

"The avoidance of 'bumping' can be achieved by the addition of pieces of broken pot or special anti-bumping granules, which promote smooth boiling. Anti-bumping material should only be added to a cold liquid. If there is a need to add it to a liquid that has already been heated, the liquid should be removed from the heat and allowed to cool for several minutes, otherwise it may boil over."

A letter received from a member provides a dramatic illustration of the necessity for this advice:

"During a class distillation of an ethanol/water mixture the teacher in charge realised that the pupils had not added anti-bumping granules. He asked the pupils to stop heating and remove the bungs from the flasks. On adding granules to two of the flasks violent boiling occurred and hot ethanol was thrown out, to a height of one metre or more. The ethanol on the bench was then ignited by a bunsen burner .....".