# SSERC logo

**SSERC Risk Assessment** (revised version March 2018)

(based on HSE’s INDG 163 ‘Risk assessment - A brief guide to controlling risks in the workplace’)

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| Activity assessed | Whoosh Bottle |
| *Date of assessment* | 20th November 2020 |
| *Date of review (****Step 5****)* |  |
| *School* |  |
| *Department* |  |

| Step 1 | Step 2 | Step 3 | Step 4 | | |
| --- | --- | --- | --- | --- | --- |
| *List Significant hazards here:* | *Who might be harmed and how?* | *What are you already doing?*  *What further action is needed?* | *Actions* | | |
| *by whom?* | *Due date* | *Done* |
| Industrial denatured alcohol (IDA) is highly flammable | Technician, teacher by burns | Wear eye protection  Wear Gloves  Keep well away from any sources of ignition  Both demonstrator and audience to wear eye protection.  The container must have the ‘PC’ mark on it. If there are any signs of damage, frosting or cracking the container must be replaced.  **Ensure the distance between the container and the ceiling is more than 2.5 metres.**  **Ensure the audience is more than 1 metre away from the container.**  Light and hold the splint over the neck of the bottle using a 1M rule to keep a good distance back. |  |  |  |

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| **Description of activity:**  Using an 18 l narrow necked polycarbonate container to show combustion of a fuel producing a “whoosh” noise. |
| **Additional comments:**  Some people have ‘adapted’ this experiment by fixing the bottle on its side to a skateboard or similar and letting the reaction propel the skateboard. This has led to some accidents and should be avoided – a safer way to show this is the ethanol rocket experiment, which uses exactly the same reaction but on a smaller scale. |