# 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 | Methane Bags |
| *Date of assessment* | 30th June 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* |
| Methane oxygen mixture explodes with a very loud bang. | Demonstrator / Audience | Demonstrator wear ear defenders.  Advise audience to place fingers in their ears and ensure they are at least 2 metres away from bags.  Modify scale of demonstration to the size of the room.  Use safety screen. Wear appropriate eye protection |  |  | |  | |
| Danger of oxygen fire from cylinder | Demonstrator / Audience | Ensure oxygen cylinder is removed from area of demonstration and all valves are turned off before igniting the bags. |  |  | |  | |

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| **Description of activity:**  A plastic bag – from a loaf of bread or similar – is filled with methane and ignited.  The procedure is repeated with a mixture of methane and oxygen. |
| **Additional comments:**  **Do not be tempted to try this with hydrogen-very dangerous.** |