# 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 | Ether Runway |
| *Date of assessment* | 3rd June 2019 |
| *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* |
| Ethoxyethane is extremely flammable with denser than air vapour. | Demonstrator and pupils by burning | Measure out the ethoxyethane well away from any sources of ignition and store in capped bottles to avoid the escape of flammable vapours.  Do **not** exceed the stated amount.  Demonstrator eye protection (possibly a face shield)  Audience to be at least 4m back, wearing eye protection.  Use safety screens to protect audience and demonstrator. |  |  | |  | |

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| **Description of activity:**  A ramp is set up using a length of guttering with a tealight sitting on heatproof mats at the bottom of it.  The tealight is lit and 5 – 10 cm3 of ethoxyethane is poured onto the top of the ‘runway’. The liquid, with the vapour ahead of it, travels down the ‘runway’ to the tealight which ignites it, causing a flame front to rush back up the ‘runway’ and burn briefly, but spectacularly, before extinguishing. |
| **Additional comments:**  Do NOT exceed the stated amount of ethoxyethane.  Heatproof gloves could, in some circumstances, be a good idea but in this case, it would seem to increase the likelihood of spilling the ethoxyethane and causing an unintended fire. |