# 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 | TLC of Soy Sauce |
| *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* |
| Butan-1-ol is flammable, harmful if ingested, a skin irritant and corrosive to the eyes. | Technician by splashes while preparing the chromatography solvent. | Wear eye protection and gloves. Keep away from any source of ignition. |  |  | |  | |
| Ethanoic acid is flammable and corrosive (with very irritating vapour) | Technician while preparing the chromatography solvent. | Wear goggles (EN166 3) and gloves. Work in a fume cupboard and keep away from sources of ignition. |  |  | |  | |
| The chromatography solvent is flammable and corrosive | Pupils by splashes while carrying out TLC. | Wear goggles (EN166 3) and possible gloves. Keep the lid off the bottle for as short a time as possible. Keep away from sources of ignition. |  |  | |  | |
| Ninhydrin is harmful if swallowed and a skin/eye respiratory irritant.  The main hazards are likely to come from the solvent, often Butan-1-ol (see above)  If it is in a different solvent, check the hazards. | Pupils/teacher by inhaling fumes/droplets while spraying chromatogram. | Spray the plate in a fume cupboard.  Wear eye protection and gloves. Keep away from sources of ignition. |  |  | |  | |

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| **Description of activity:**  Soy sauces are run on TLC plates and developed with ninhydrin spray. |
| **Additional comments:** |