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**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 | Fat in Crisps |
| *Date of assessment* | December 2024 |
| *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* |
| Propanone is highly flammable.  It is also a respiratory irritant | Learners or others by fire  Learners or anyone else in the room by inhaling fumes | Do not heat solvent with a naked flame.  Keep well away from sources of ignition.  Work in a well-ventilated laboratory.  Carry out evaporation of solvent in a fume cupboard. |  |  |  |
| Hot liquids can spit. | Learners while distilling off solvent via splashes in the eye. | Wear eye-protection when heating substances. |  |  |  |
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| **Description of activity:**  Crisps are ground in a pestle and mortar and then shaken (carefully) with propanone.  The slurry is filtered through a plug of glass wool and the filtrate, containing fat/oil dissolved in the solvent, is heated in a hot water bath to distil off the propanone.  This is then evaporated to leave the fat/oil. |

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| **Additional comments:**  If other solvents are used, the risk assessment will need to be amended to account for any different properties they have.  The distilled off propanone can be kept and re-used for similar experiments. |