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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 | Melting point of Benzoic Acid |
| *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* |
| Benzoic acid is a skin and respiratory irritant and causes serious eye damage. | Learner (most likely) by contact with skin and especially eyes. | Avoid raising dust. Wear goggles, though the likelihood of a small amount of solid contacting the eye, other than by contact with the fingers is negligible. Consider wearing gloves.  |  |  |  |
| Hot oil in a Thiele tube can cause serious burns. | Learner by spillage. | Ensure tube is not cracked before use.Support tube firmly in place with a clamp.Allow to cool before handling. |  |  |  |
| Cooking oil is combustible. | Learner by fire or fumes. | Do not leave the heating tube unattended.Fire is very unlikely. Unless the oil is overheated by eg a Bunsen burner or very hot oil falls from a broken tube onto a flame, the chance of fire is negligible. |  |  |  |
| Any other compounds being used for melting point tests need to be risk assessed separately |  |  |  |
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| **Description of activity:**A small amount of a solid is placed in a capillary tube and either placed in a melting point apparatus or fixed to a thermometer in a Thiele tube.The apparatus is used to heat the substance in the capillary tube while observing it and the points at which it begins and ends melting are recorded. |

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| **Additional comments:**Any change in materials either for MP analysis or liquids for heating will need to be risk assessed separately.**Disposal** - the capillary can just be placed in the glass waste bin. |