# 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’)

2 Pitreavie Court, South Pitreavie Business Park, Dunfermline KY11 8UU

tel : 01383 626070 e-mail : [enquiries@sserc.org.uk](mailto:enquiries@sserc.org.uk) web : [www.sserc.org.uk](http://www.sserc.org.uk)

# 

|  |  |
| --- | --- |
| Activity assessed | Cooling Curves using Salol or Octadecanoic acid |
| *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* |
| Salol (Phenyl salicylate) may cause irritation to eyes and skin and respiratory system | Teacher or pupils carrying out the experiment. | Work in a well ventilated area.  Wear eye protection.  Avoid contact with skin. If in contact with skin, wash exposed area with soap and water.  Do not boil the |  |  | |  | |
| Octadecanoic acid (Stearic acid) has no significant hazards |  |  |  |  | |  | |

|  |
| --- |
| **Description of activity:**  Put some salol/octadecanoic acid and a thermometer into a boiling tube.  Put the boiling tube in a hot water bath. Allow the salol to melt and reach the temperature of the hot water.  Take the boiling tube out of the hot water.  Measure and record the temperature of the salol every minute for about 20 minutes, stirring briefly to evenly mix the hot and cold parts.  Plot a graph of temperature against time. |
| **Additional comments:**  Disposal: With care, the solids can be scraped off the glass slide and returned to the container for re-use. Any small amount left on the slide can be washed off with hot water and flushed down the drain with copious amounts of water. Alternatively, bag the slide with the salol and dispose with normal rubbish.  Wash hands thoroughly after handling. |