# 

**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 | Bleaching of Blue Food Dye |
| *Date of assessment* | 4th Dec 2018 |
| *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* |
| Sodium hypochlorite (bleach) solution is corrosive | Teacher/technician while decanting, pupil during use. | Wear goggles (BS EN 166 3).  If spilt on skin, wash off with copious quantities of water. |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |
| --- |
| **Description of activity:**  A diluted solution of blue food dye is reacted with bleach solution, which decolourises it. The reaction is followed using a colorimeter.  From the data obtained, it is possible to calculate the rate constant and the order of the reaction. |

|  |
| --- |
| **Additional comments:**  Use thin bleach only. Check the label, some bleaches use hydrogen peroxide instead of sodium (I) chlorate. |