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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 | Ceramics – making glass |
| *Date of assessment* | October 2016 |
| *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* |
| Lead oxide is harmful if swallowed or inhaled, is a reproductive toxin and is a specific target organ toxin to the CNS. | Technician while preparing the mixture by inhalation or ingestion. Pupils/teachers by inhalation or ingestion | Wear goggles (BS EN 166 3) and consider gloves. Avoid raising dust and work in a well-ventilated area. |  |  |  |
| Boric acid is a reproductive toxin. | Teacher/technician while measuring out samples.Pupils/teachers by inhalation or ingestion | Wear goggles (BS EN 166 3) Avoid raising dust.  |  |  |  |
| Cobalt oxide is harmful if swallowed and a skin sensitiser. | Teacher/technician decanting samples.Pupils teachers by spilling. | Avoid raising dust while measuring out and consider wearing gloves.Pupils are using extremely small amounts – the risk is not significant. |  |  |  |
| Manganese oxide is harmful if swallowed or inhaled.Phenolphthalein is a Cat 2 carcinogen. The indicator solution is highly flammable | Teacher/technician decanting samples.Pupils teachers by spilling. | Avoid wearing dust while measuring out and consider wearing gloves.Pupils are using extremely small amounts – the risk is not significant. |  |  |  |
| Chromium(III) oxide is harmful if swallowed, a skin/eye irritant, a skin sensitiser and is a reproductive toxin | Teacher/technician decanting samples.Pupils teachers by spilling. | Wear eye protection. Avoid raising dust while measuring out and consider wearing gloves.Pupils are using extremely small amounts – the risk is not significant. |  |  |  |
| Copper and zinc oxides are not hazardous to health |  |  |  |  |  |
| The glass produced is on no significant hazard |  |  |  |  |  |
| The molten glass mixture is very hot – care should be taken not to spill it. |  |  |  |  |  |

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| **Description of activity:**This is the borax bead test used for identifying metals. A low melting point glass is made using lead oxide and very small amounts of metal oxides are mixed in – these give characteristic colours to the glass. |

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| **Additional comments:** |