

NDMRB-RA-030

Risk Assessment: Virkon

Scope

Virkon is a powerful disinfectant used for the decontamination of biological waste. Virkon's main active ingredient, **peroxymonosulphate**, is a **strong oxidising agent**. Strong enough to form Chlorine from chloride. Therefore concentrations and contact times below must be followed and waste must be disposed of promptly.

| ITEM | CONCENTRATION | CONTACT TIME |
|--|-------------------------------------|--------------------------------------|
| Plastic ware / Glass ware | 1% solution or 2% if heavily soiled | At least 30 minutes (fully immersed) |
| Liquids eg: Samples, Culture supernatant | Final concentration of 2% | 30 minutes |
| Surfaces, including benches and floors | 1% solution | Wipe over |
| Minor surface contamination | 1% solution | 10 minutes |
| Large spills including body fluids | Powder | 10 minutes |

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

| | | | | | |
|--------------------------|--|----------------------------|--|---------------------|--|
| Name of assessor: | | Date of Assessment: | | Review Date: | |
|--------------------------|--|----------------------------|--|---------------------|--|

Risk Matrix:

| | | | | | |
|-------------|---------------|------------------|------------------|------------------|------------------|
| Risk Matrix | | Likelihood | | | |
| | | High | Medium | Low | Negligible |
| Consequence | Severe | High | High | Medium | Effectively Zero |
| | Moderate | High | Medium | Medium/low | Effectively Zero |
| | Insignificant | Medium/Low | Low | Low | Effectively Zero |
| | Negligible | Effectively Zero | Effectively Zero | Effectively Zero | Effectively Zero |

Risk Assessment:

| Hazard (Cause and consequence) | Affected Groups | Existing controls | Risk | Further Action |
|---|------------------------------|--|--------|----------------|
| Exposure to Virkon powder or Virkon solution | Staff, students and visitors | Via inhalation: stock of powdered Virkon must be ran down and replaced by tablet form. Via skin adsorption: User must wear gloves and labcoat at all time. Via instillation (eye): User must wear safety spectacles at all time. See specific COSHH risk assessment. | Medium | None |
| Corrosion to Equipment due to misuse of Virkon – this could like to equipment failure via loss of integrity | Staff, students and visitors | Corrosion must be reported immediately to the Laboratory Manager. Users are instructed to rinse any surfaces and equipment thoroughly via water if Virkon has been used as a disinfectant. Unless specifically required, Virkon should not be used on equipment, CHEMgene should instead be the disinfectant of choice as it is non corrosive. | Medium | None |
| Work in CL3 – potential exposure to pathogen leading to the user illness. | Staff, students and visitors | Users will undergo a safety induction with the CL3 Safety Officer. They will be given on the job training and will have to demonstrate their experience before being given access to the CL3 suites. All work in the CL3 is subject to the CL3 Code of Practice. | Medium | None |

Signed By Author:

Approved by (sign and print):

Reviewed by:

Review date: