**RINGERS SOLUTION ¼ STRENGTH**

**Typical Formula**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Grams per litre</th>
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</thead>
<tbody>
<tr>
<td>Sodium chloride</td>
<td>2.25</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>0.105</td>
</tr>
<tr>
<td>Calcium chloride 6H2O</td>
<td>0.12</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>0.05</td>
</tr>
</tbody>
</table>

**Preparation**

Dissolve Ringers Solution tablets (2 tablets/ litre) in de-ionised water. Dispense 9ml into final containers, universal bottles. Sterilise at 121°C for 15 minutes. Label each bottle and pack in units of 24 in labelled boxes.

**Format**

Twenty four universal bottles with plastic screw cap closures in a box.

**Labels**

Label gives details of product name, product code, recommended storage temperature, lot number and expiry date.

**Physical Characteristics**

**Physical Tests**

- **Colour**: Colourless
- **Clarity**: Clear
- **Fill weight**: 9.0g - 9.3g

N.B. A pH of 7.0 ± 0.2 prior to autoclaving can be considered confirmation of the integrity of the product. Variation of pH out of specification after autoclaving is most likely to be caused by factors originating from sources other than the product e.g. water, glassware and autoclaving.

**Packaging and presentation**

General appearance of bottle and label should be satisfactory. Label data should be correct.

**Sterility Test**

Macroscopic examination should show no evidence of microbial growth after incubation at 20 - 24°C and 30 - 34°C for 5 days.

**Microbiological Tests Using Optimum Inoculum Dilution**

**Positive controls**

Inoculum 50 - 150 colony forming units

*Escherichia coli* ATCC 8739

Recovery after incubation at 23 - 27°C for 45 minutes shall be between 50% and 150% of the initial count. Counts are performed on Tryptone Soya Agar incubated at 35 - 39°C for 18 - 24 hours.

**Storage conditions**

Store away from light between 2 - 10°C. Product shelf life from date of production is 4 months.