Area Description: Cleaning Manual Document Control
Responsible Person: Production Manager
Engineering assistance Required: N/A
Person Responsible for Inspection: Production Manager & Sealed Air Representative

Instruction

1. Originality of Manual
   a. The master Cleaning Works Instruction must be signed in blue ink by the relevant Authorising Officer.
   b. The Master Cleaning Works Instruction must be held in a secure place.
   c. Copies of the Cleaning Works Instruction must be distributed to the relevant Example Dairy personnel.
   d. All Copies of the original must bear the stamp "ORIGINAL" in blue ink.

2. Amendment of Cleaning Works Instruction

   The following procedure is required in order for amendments to be made:
   a. Written request is made for the revision by whatever party using appropriate form (annex 2)
   b. The request is discussed and evaluated by Example Dairy and Sealed Air.
   c. If approved by all relevant parties, changes to Cleaning Works Instruction are made by Sealed Air.
   d. Sealed Air representative is responsible for the filing and distribution of the amended instruction.
   e. The request for amendment is filed in the master Cleaning Works Instruction and the Amendment Register (annex 1) is completed.
   f. The original amended instruction is stamped “SUPERSEDED” in red ink and retained in the master file.

Note: Under no circumstances may any changes be made unless the above procedure is followed.

3. Distribution List

<table>
<thead>
<tr>
<th>Location</th>
<th>Responsible Person</th>
<th>Section of Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Manager</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Production Manager</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Laboratory</td>
<td>All</td>
<td>All</td>
</tr>
</tbody>
</table>

4. Review of Cleaning Works Instruction

   a. The complete Cleaning Works Instruction must be reviewed annually and be re-issued to all relevant parties if revisions have been made. Review is recorded on Sealed Air System Audit report.
   b. All previous master copies are achieved and all other copies are to be destroyed and will be regarded as irrelevant.

Compiled By: 
Service Provider: Sealed Air Food Care
Approved By: Production Manager
Date: 2014/08/02
Revision no.: 0
Area Description: Service Responsibilities of Chemical Supplier
Responsible Person: Sealed Air Representative
Engineering assistance Required: N/A
Person Responsible for Inspection: Production Manager & Sealed Air Representative

Instruction

1. Scope of Service

a. Supply of cleaning and sanitation chemicals.
b. Supply and servicing of Chemical dispensing apparatus.
c. Technical assistance in the correct application and efficient use of chemicals.
d. Monitoring and auditing of cleaning processes.
e. Training of all staff in the correct and safe use of Chemical products.
f. Report all deviations from good manufacturing practice and observations.

2. Equipment Service

The following equipment shall be Serviced as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Equipment Description</th>
<th>Service Interval</th>
<th>Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Reports

The following reports shall be submitted:

<table>
<thead>
<tr>
<th>Report</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Visit Report</td>
<td>Following each Monthly visit</td>
</tr>
<tr>
<td>System Audit Report</td>
<td>Annually</td>
</tr>
<tr>
<td>Training Record</td>
<td>As training is conducted</td>
</tr>
<tr>
<td>Action Report</td>
<td>As required</td>
</tr>
</tbody>
</table>

Compiled By: Service Provider
Approved By: Production Manager
Date: 2014/08/02
Revision no.: 0
Area Description: Chemical Product Information
Responsible Person: Safety Officer
Engineering assistance Required: N/A
Person Responsible for Inspection: Production Manager

Instruction

1. Safe Handling of chemicals
a. All chemicals should be considered hazardous and be handled with the utmost care.
b. Take note of the hazardous nature of the Chemical before handling by reading the label indicating
c. Wear the protective equipment applicable to each hazard sign.

<table>
<thead>
<tr>
<th>Hazard Sign</th>
<th>Protective Equipment</th>
<th>Special Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gloves, Apron, Eye Shield, Safety Boots</td>
<td>Avoid contact with human tissue, Avoid contact with soft metals</td>
</tr>
<tr>
<td></td>
<td>Gloves, Apron, Eye Shield, Safety Boots</td>
<td>Avoid contact with human tissue, Avoid contact with soft metals, Store away from organic material</td>
</tr>
<tr>
<td></td>
<td>Gloves, Eye Shield</td>
<td>Avoid contact with human tissue</td>
</tr>
</tbody>
</table>

2. Colour Coding of chemicals

<table>
<thead>
<tr>
<th>Colour</th>
<th>Chemical Type</th>
<th>pH Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple</td>
<td>Highly alkaline / caustic based products</td>
<td>11 - 14</td>
</tr>
<tr>
<td>Brown</td>
<td>Alkaline products</td>
<td>9 - 11</td>
</tr>
<tr>
<td>Red</td>
<td>Acidic products</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Yellow</td>
<td>Chlorinated products</td>
<td>Chlorine</td>
</tr>
<tr>
<td>Green</td>
<td>Neutral products</td>
<td>5 - 9</td>
</tr>
<tr>
<td>Blue</td>
<td>Disinfectants</td>
<td>Neutral Disinfectants</td>
</tr>
</tbody>
</table>

Note the most hazardous nature of the product will dictate the colour code.
Example - Reclaim is highly alkaline but is Chlorinated and therefore is Yellow.
Example - Perasan is a Disinfectant but is highly acidic and therefore is Red

3. Safe Storage of chemicals
a. The Chemical storage area should be well lit and ventilated and clearly demarcated for Chemical storage.
b. All acidic products should be isolated from Chlorinated, alkaline and neutral products.
c. Oxidising Agents should be stored away from organic material such as wood and cardboard.
   Plastic or steel pallets must be used.

Compiled By: Service Provider
Approved By: Production Manager
Date: 2014/08/02  Revision no. 0
Area Description: All areas requiring cleaning
Responsible Person: All production staff
Engineering assistance Required: N/A
Person Responsible for Inspection: Production Manager

## Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning</td>
<td>the removal of soil and dirt from a surface by Chemical of mechanical action.</td>
</tr>
<tr>
<td>Sanitising</td>
<td>the treatment of a clean surface with chemicals to reduce the number of micro-organisms</td>
</tr>
<tr>
<td>CIP (Cleaning-in-Place)</td>
<td>automatic cleaning of equipment by circulating a cleaning solution with pumps without requiring extensive manual washing.</td>
</tr>
<tr>
<td>Manual Cleaning</td>
<td>cleaning requiring dismantling equipment where applicable and manual scrubbing of surfaces with a cleaning solution and brushes.</td>
</tr>
<tr>
<td>Foam Cleaning</td>
<td>the application of a cleaning or sanitising solution in a foam medium created by an apparatus that generates a foam by mixing air into the solution.</td>
</tr>
<tr>
<td>Sterilisation</td>
<td>any process that eliminates all micro-organisms including spores.</td>
</tr>
</tbody>
</table>

## Factors Influencing the Cleaning process

### 1. Water Quality

Water conditions determine the method of cleaning including the type of cleaning agents required. Water conditions ideal for cleaning are as follows:

- Total water hardness < 120ppm
- pH 7
- Low organic content
- A microbial count of <1000 cfu

### 2. Solubility of Soil

Soil types are soluble in varying conditions:

- Water soluble e.g. Sugars and some salts
- Soluble in alkalis e.g. Fats and proteins
- Soluble in acids e.g. Mineral deposits
- Most soils are complex and contain all three types of solubility

### 3. Cleaning Method

- CIP (Cleaning-in-place)
- Manual Cleaning

## The Cleaning Parameters

The Cleaning Parameters include:

- Mechanical Action
- Time
- Temperature
- Concentration

## Example Cleaning Works Instruction

Reference no. CH004

Dairy Principles of Cleaning

Cleaning Parameters

Compiled By: Sealed Air Food Care
Approved By: Production Manager
Date: 2014/08/02
Revision no.: 0
Titration Method - Caustic

Note: All caustic based products are titrated with this method and expressed as %NaOH. Products Include: Bottlers XLF, Alkali 8000 and Alakli 8000

Test Method - Caustic

Reagents

0.1N HCl
Phenolphthalein Indicator

Method

1. Pipette 10 ml sample into an Erlenmeyer flask
2. Add 3 drops of Phenolphthalein indicator
3. Titrte with 0.1N HCL until colour changes to from pink to colourless
4. Take reading and calculate %NaOH by Using the following Calculation

Calculation

% NaOH (m/v) = titre x 0.04
Test Method - CIP Acid

Reagents

0.1N NaOH
Phenolphthalein Indicator

Method

1. Pipette 50 ml sample into an Erlenmeyer flask
2. Add 3 drops of Phenolphthalein indicator
3. Titrate with 0.1N NaOH until colour changes to colourless to pink.
4. Take reading and calculate % Acid by Using the following Calculation

Calculation

\[
\% \text{ Acid (v/v)} = \text{titre} \times 0.029
\]
## Example Dairy

### Factory Entrance

<table>
<thead>
<tr>
<th>Area Description</th>
<th>: Factory Entrance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Person</td>
<td>: All People Entering the Production Area</td>
</tr>
<tr>
<td>Engineering assistance Required</td>
<td>: N/A</td>
</tr>
<tr>
<td>Person Responsible for Inspection</td>
<td>: Production Manager</td>
</tr>
</tbody>
</table>

### Use Product Code Hazard - Neat Dilution Cleaning Tool Required

<table>
<thead>
<tr>
<th>Use</th>
<th>Product</th>
<th>Code</th>
<th>Hazard - Neat</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Soap</td>
<td>Softcare Bac</td>
<td>Disinfectant</td>
<td>Neat</td>
<td></td>
</tr>
<tr>
<td>Hand Sanitiser</td>
<td>Handasept</td>
<td>Disinfectant</td>
<td>Neat</td>
<td></td>
</tr>
</tbody>
</table>

### Protective Equipment Required

- Cap
- Overall
- Safety Boots

### Special Precautions

### Instruction

**A. Factory Entrance**

1. Upon entry into the factory building, thoroughly wash hands and arms up to your elbows using **Softcare Bac** following illustration displayed and using hot water.
2. Rinse hands thoroughly.
3. Dry hands using paper towel.
4. Apply one squirt of **Handasept** and rub into hands and allow to air dry.

**E. Upon using Ablution Facilities and Re-entering the Factory Building**

1. Wash hands thoroughly using hot water and **Softcare Bac**, following the illustration displayed.
2. Rinse hands thoroughly.
3. Dry hands using paper towel.
4. Apply one squirt of **Handasept** and rub into hands and allow to air dry.

---

### Sealed Air

**Compiled By**

Production Manager

**Approved By**

Production Manager

**Date**

2014/08/02

**Revision no.**

0
Example Dairy

Cleaning Works Instruction
Floor Cleaning

Area Description: All Factory Floors
Responsible Person: All Production Workers and Cleaners
Engineering assistance Required: N/A
Person Responsible for Inspection: Production Manager

<table>
<thead>
<tr>
<th>Use</th>
<th>Product</th>
<th>Code</th>
<th>Hazard - Neat</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral Detergent</td>
<td>Shurehand Plus</td>
<td>Neutral Detergent</td>
<td>0.3-1%</td>
<td>100-250ml/25L Bucket</td>
</tr>
<tr>
<td>Detergent</td>
<td>TR 91</td>
<td>Caustic</td>
<td></td>
<td>150g or 1 handful per sqm</td>
</tr>
</tbody>
</table>

Cleaning Tool Required:
- broom
- Brush
- Bucket
- Water Hose

Protective Equipment Required:
- Gloves
- Apron
- Eye Shield
- Safety Boots

Special Precautions:
1. Switch off all electrical equipment.
2. Do not use excessive water near electrical equipment.

Daily Instruction Following Production:
1. Remove all equipment and packaging material from floor.
2. Sweep floors removing all gross soils and discard into waste bins. **Do not flush into drains!**
3. Rinse with **HOT** water and remove all milk residues to drain.
4. Apply **Shurehand Plus** to floor.
5. Scrub and then allow to stand for 5 min.
6. Scrub vigorously in areas of high soiling.
7. Rinse with cold water until all detergent residues are removed.

Deep Clean - Weekly:
1. Remove all equipment and packaging material from floor.
2. Sweep floors removing all gross soils and discard into waste bins. **Do not flush into drains!**
3. Rinse with hot water and remove all milk residues to drain.
4. Sprinkle **TR91** directly onto floor and scrub.
5. Allow to soak for 5 min.
6. Scrub vigorously until all soils are removed.
7. Rinse with cold water until all detergent residues are removed.

Key Inspection Points:
1. Visual inspection.

Compiled By: Service Provider
Approved By: Production Manager
Date: 2014/08/02
Revision no.: 0
Example Dairy

Cleaning Works Instruction

Walls & Windows

<table>
<thead>
<tr>
<th>Use</th>
<th>Product</th>
<th>Code</th>
<th>Hazard - Neat</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral Detergent</td>
<td>Shurehand Plus</td>
<td>Neutral Detergent</td>
<td>0.3-1%</td>
<td>100-250ml/25L Bucket</td>
</tr>
<tr>
<td>Neutral Detergent</td>
<td>Shurehand Plus</td>
<td>Neutral Detergent</td>
<td>0.3-1%</td>
<td>100-250ml/25L Bucket</td>
</tr>
</tbody>
</table>

Cleaning Tool Required

- Brush
- Bucket
- Scotce-Brite
- Water Hose
- Cloth
- Bucket

Protective Equipment Required

- Gloves
- Apron
- Eye Shield
- Safety Boots

Special Precautions

1. Switch off all electrical equipment before dismantling.
2. Seek engineering advice where applicable
3. Do not use excessive water near electrical equipment

Daily Instruction Following Production

1. Switch off equipment where applicable.
2. Sweep away all loose debris.
3. Rinse all areas with lukewarm water (40°C) removing all solid soils and milk residues.
4. Make up a HOT (45-50°C) 1% solution of Shurhand Plus and scrub all areas using brushes, Scotce-Brite (only on non-food contact areas). No cloths are allowed!
5. Rinse with clean running water until all soils and detergent are removed.

Monthly Instruction - Window Cleaning

1. Make up a 0.3-1% cold solution of Shurehand Plus.
2. Wipe down windows with a cloth.
3. Rinse with cold water.
4. Dry with a clean dry cloth

Key Inspection Points

1. Visual inspection.
3. Microbiological swab results.

Compiled By: Service Provider

Approved By: Production Manager

Date: 2014/01/10

Revision no.: 0

Sealed Air
Food Care
**Area Description:** Ablution Areas

**Responsible Person:** All Production Workers and Cleaners

**Engineering assistance Required:** None

**Person Responsible for Inspection:** Production Manager

---

### Use | Product Code | Hazard - Neat | Dilution | Cleaning Tool Required
--- | --- | --- | --- | ---
Detergent | Regal Akali Detergent | Neat | | [Brush, Bucket, Scotce-Brite, Water Hose]
Sanitiser | Nu-Pine Sanitiser | 0.5% or 1 Cup per 25L | | [Bucket]

---

### Protective Equipment Required
- Gloves
- Apron
- Eye Shield
- Safety Boots

### Special Precautions
1. Switch off all electrical equipment before dismantling.
2. Seek engineering advice where applicable
3. Do not use excessive water near electrical equipment

### Daily Instruction Following Production
1. Switch off equipment where applicable.
2. Sweep all debris and dispose into waste bins.
3. Flush toilets, urinals floor and walls with water.
4. Apply **Regal** to all surfaces and scrub.
   - Scotce-Brite (only on non-food contact areas).
5. Rinse with clean running water until all soils and detergent are removed.
6. Make up a **COLD** 0.5% solution of **Nu-Pine** and apply to all surfaces. Do not rinse

### Key Inspection Points
1. Visual inspection.

---

**Compiled By**
Sealed Air Food Care

**Service Provider**

**Approved By**
Production Manager

**Date** 2014/08/02  **Revision no.** 0
**Example Dairy**

**Cleaning Works Instruction**

Drains

**Reference no. CH011**

**Area Description**: Drains  
**Responsible Person**: All Production Workers and Cleaners  
**Engineering assistance Required**: None  
**Person Responsible for Inspection**: Production Manager

### Use, Product, Code, Hazard - Neat, Dilution

<table>
<thead>
<tr>
<th>Use</th>
<th>Product</th>
<th>Code</th>
<th>Hazard - Neat</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral Detergent</td>
<td>Shurehand Plus</td>
<td>Neutral Detergent</td>
<td>0.3-1%</td>
<td>100-250ml/25L Bucket</td>
</tr>
<tr>
<td>Sanitiser</td>
<td>Perasan</td>
<td>Acid</td>
<td>0.5% or 1 Cup per 25L</td>
<td></td>
</tr>
</tbody>
</table>

### Cleaning Tool Required

- Brush  
- Bucket  
- Scotce-Brite  
- Water Hose  
- Bucket

### Protective Equipment Required

- Gloves  
- Apron  
- Eye Shield  
- Safety Boots

### Special Precautions

1. Switch off all electrical equipment before dismantling.  
2. Seek engineering advice where applicable  
3. Do not use excessive water near electrical equipment

### Daily Instruction Following Production

1. Sweep floor area and wash as per instruction CH008  
2. Flush drain with water.  
3. Remove the drain cover and wash using a **HOT (45-50°C)** 1% solution of **Shurehand Plus** and scrub all areas.  
4. Rinse using cold water and replace drain cover.  
5. Pour a 0.5% solution of **Perasan** around and into the drain. Do not rinse.

### Key Inspection Points

1. Visual inspection.  
3. Absence of following:  
   a. Bluish perlmen colour indicating protein build-up.  
   b. White/yellow residue indicating mineral or milkstone residue.  
   c. Water droplets indicating fatty residue.  
   d. Cracks on rubber seals.  
   e. Milky or hazy liquid indicating detergent residue.  
4. Microbiological swab results.

### Compiled By

Sealed Air Food Care

### Approved By

Production Manager

### Date

2014/08/02  
Revision no. 0
Area Description: All Equipment
Responsible Person: All Production Workers and Cleaners
Engineering assistance Required: None
Person Responsible for Inspection: Production Manager

**Use** | **Product** | **Code** | **Hazard - Neat** | **Dilution** |
---|---|---|---|---|
Detergent | Diokem | Chlorinated | 1% or 1 cup | or 1 cup Litre |
Sanitiser | Perasan | Acid | 0.2-0.5% | per 25L |

**Cleaning Tool Required**
- Brush
- Bucket
- Scotce-Brite
- Water Hose
- 75ml per 25L

**Use** | **Product** | **Code** | **Hazard - Neat** | **Dilution** |
---|---|---|---|---|
Sanitiser | Perasan | Acid | 0.2-0.5% | per 25L |

**Cleaning Tool Required**
- Bucket

**Protective Equipment Required**
- Gloves
- Apron
- Eye Shield
- Safety Boots

**Special Precautions**
1. Switch off all electrical equipment before dismantling.
2. Seek engineering advice where applicable
3. Do not use excessive water near electrical equipment

**Daily Instruction Following Production**
1. Switch off equipment where applicable.
2. Dismantle equipment according to manufacturer's instruction.
3. Rinse all components with lukewarm water (40°C) removing all solid soils and milk residues.
4. Make up a HOT (45-50°C) 1% solution of Diokem and scrub all areas of the components using brushes, Scotce-Brite (only on non-food contact areas). No cloths are allowed!
5. Rinse with clean running water until all soils and detergent are removed.
6. Make up a COLD 0.5% solution of Perasan and soak all utensils for 5 min. to sanitise.
7. Re-assemble equipment or allow to air dry.
8. Re-sanitise all utensil in Perasan solution if not used within 12hrs

**Key Inspection Points**
1. Visual inspection.
3. Absence of following:
   - Bluish perlomen colour indicating protein build-up.
   - White/yellow residue indicating mineral or milkstone residue.
   - Water droplets indicating fatty residue.
   - Cracks on rubber seals.
   - Milky or hazy liquid indicating detergent residue.
4. Microbiological swab results.

Compiled By: Service Provider
Approved By: Production Manager
Date: 2014/01/10 Revision no. 0
Objective: To ensure efficient running of CIP System

1. Check all valves for leaks and complete seal.
2. Ensure no ‘dead ends’ in system.
3. Ensure only specified sprayball are use in tanks.
4. Ensure all electrical installations are safe and in good repair.
5. Ensure pump flowerets are to specification.
6. Check all sieves and strainers in CIP lines.
7. Check all dosing equipment is in working order and primed.
Example Dairy

Cleaning Works Instruction

Cleaning-in-Place

Reference no. CH014

Area Description: Cold Product Lines
Responsible Person: Operator
Engineering assistance Required: N/A
Person Responsible for Inspection: Production Manager & Sealed Air Representative

<table>
<thead>
<tr>
<th>Use</th>
<th>Product Code</th>
<th>Code</th>
<th>Hazard - Neat</th>
<th>Dilution</th>
<th>Cleaning Tool Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caustic Detergent</td>
<td>Alkali 8000</td>
<td>Caustic</td>
<td>0.4-0.7% Auto Dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acid Detergent</td>
<td>CIP Acid 1%</td>
<td>Acid</td>
<td>0.4-0.7% Auto Dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detergent</td>
<td>Diton Chlorinated Alkali</td>
<td>1% or 1 cup 25L bucket</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitiser</td>
<td>Divosan QC 0.5%</td>
<td>Sanitiser</td>
<td>125ml per 25L Bucket</td>
<td>Brush, Bucket, Scotce-Brite, Water Hose</td>
<td></td>
</tr>
</tbody>
</table>

Protective Equipment Required:
- Gloves
- Apron
- Eye Shield
- Safety Boots

Daily
1. Switch off equipment where applicable.
2. Dismantle equipment according to manufacturer's instruction.
3. Rinse all components with lukewarm water (40°C) removing all solid soils and milk residues.
4. Make up a HOT (45-50°C) 1% solution of Diton and scrub all areas of the components using brushes, Scotce-Brite (only on non-food contact areas). No cloths are allowed!
5. Rinse with clean running water until all soils and detergent are removed.
6. Make up a COLD 0.5% solution of Divosan QC and soak all utensils for 5 min. to sanitise.
7. Re-assemble equipment or allow to air dry.
8. Re-sanitise all utensils in Divosan QC solution if not used within 12hrs

Cleaning-in-Place
1. Connect CIP pipes.
2. Start automated CIP
3. Sign off CIP on completion.

Key Inspection Points
1. Concentration Tests.
2. Visual Inspection and Check List.
# Example Dairy

## Cleaning Works Instruction

### Cleaning-in-Place

<table>
<thead>
<tr>
<th>Use</th>
<th>Product Code</th>
<th>Hazard - Neat</th>
<th>Dilution</th>
<th>Cleaning Tool Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caustic Detergent</td>
<td>Alkali 8000</td>
<td>Caustic</td>
<td>0.4-0.7% Auto Dose</td>
<td></td>
</tr>
<tr>
<td>Acid Detergent</td>
<td>CIP Acid</td>
<td>Acid</td>
<td>0.4-0.7% Auto Dose</td>
<td></td>
</tr>
<tr>
<td>Sanitiser</td>
<td>Perasan</td>
<td>Acid</td>
<td>0.2-0.5% Auto Dose</td>
<td></td>
</tr>
</tbody>
</table>

### Protective Equipment Required
- Gloves
- Apron
- Eye Shield
- Safety Boots

### Special Precautions
- Falls
- Burns
- Splinters

### Daily after Use

<table>
<thead>
<tr>
<th>Inside CIP</th>
<th>Time</th>
<th>Temp</th>
<th>Flow Speed</th>
<th>Special Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold Water Rinse</td>
<td>5 min</td>
<td>Ambient 1.5m/s</td>
<td>Until effluent clear</td>
<td></td>
</tr>
<tr>
<td>Caustic Circulate</td>
<td>10 min</td>
<td>70-75°C 1.5m/s</td>
<td>Until effluent clear</td>
<td></td>
</tr>
<tr>
<td>Cold Rinse</td>
<td>5 min</td>
<td>Ambient 1.5m/s</td>
<td>Until effluent clear</td>
<td></td>
</tr>
<tr>
<td>Acid Circulate</td>
<td>10 min</td>
<td>70-65°C 1.5m/s</td>
<td>Until effluent clear</td>
<td></td>
</tr>
<tr>
<td>Cold Rinse</td>
<td>5 min</td>
<td>Ambient 1.5m/s</td>
<td>Until effluent clear</td>
<td></td>
</tr>
<tr>
<td>Sanitise Dose</td>
<td>1 min</td>
<td>Ambient 1.5m/s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key Inspection Points
1. Concentration Tests.
2. Visual Inspection and Check List.

Compiled By: **Service Provider**
Approved By: **Production Manager**

Date: 2014/01/10
Revision no.: 0
## Cleaning Works Instruction

**Cleaning-in-Place - Pasteurisers**

**Reference no.** CH016

### Area Description
- Pasteurisers

### Responsible Person
- Operator

### Engineering assistance Required
- N/A

### Person Responsible for Inspection
- Production Manager & Sealed Air Representative

### Use | Product | Code | Hazard - Neat | Dilution | Cleaning Tool Required
--- | --- | --- | --- | --- | ---
Caustic Detergent | Alkali 8000 | Caustic | 1.5-2% Auto Dose |
Acid Detergent | CIP Acid | Acid | 1.5-2% Auto Dose |

### Protective Equipment Required
- Gloves
- Apron
- Eye Shield
- Safety Boots

### Special Precautions

### Daily after Use

**Cream Pasteuriser**

1. Open the homogeniser valve completely. Prepare for CIP.
2. Flush system with cold water until all effluent is clear.
3. Fill system with water and **heat to 75 degC**
4. Add **Alkali 8000** to make a 1.5-2% NaOH m/v solution and circulate for 40 min. Desludge separator 4 times in this step.
5. Rinse with cold water until effluent is clear.
6. Fill system with water and heat to 60degC. Add **CIP Acid** to make a 1.5-2% solution. Desludges as in 4.
7. Circulate for 35 min.
8. Drain system.
9. Rinse for 10 min. with cold water.

### Key Inspection Points

1. Concentration Tests.
2. Visual Inspection and check List.

**Compiled By**

**Service Provider**

**Approved By**

**Production Manager**

**Date**

**Revision no.**

2014/01/10

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