

Standard Operating Procedure (SOP): Selection and Preparation of Cleaning Agents and Sanitizers

This SOP details the **selection and preparation of cleaning agents and sanitizers**, covering criteria for choosing effective and safe products, proper dilution methods, compatibility with surfaces and equipment, storage requirements, and safety precautions to ensure optimal hygiene standards and prevent contamination in various environments.

1. Purpose

To establish guidelines for the selection, preparation, and handling of cleaning agents and sanitizers to ensure cleanliness, hygiene, and safety in the workplace.

2. Scope

This SOP applies to all personnel involved in cleaning and sanitation activities in *[specify area, e.g., food production, healthcare, laboratory, etc.]*.

3. Responsibilities

- **Management/Supervisor:** Ensure training and availability of suitable cleaning agents and sanitizers.
- **Staff:** Follow procedures for safe selection, preparation, and use of cleaning agents and sanitizers.

4. Selection Criteria for Cleaning Agents and Sanitizers

- Effectiveness against expected types of soils and microorganisms.
- Safety for users, surfaces, and equipment.
- Compatibility with materials and equipment involved.
- Environmental impact and regulatory compliance.
- Manufacturer's instructions and certifications (e.g., food-safe, hospital-grade).

5. Preparation and Dilution Procedures

1. Read the manufacturer's label and Safety Data Sheet (SDS) prior to use.
2. Determine required dilution ratio (e.g., 1:100, 10 mL/L, etc.).
3. Measure cleaning agent/sanitizer accurately using appropriate measuring tools.
4. Mix with clean, potable water in a designated mixing area, using personal protective equipment (PPE) as instructed.
5. Label prepared solutions with product name, concentration, date, and time of preparation, and initials of preparer.

6. Compatibility with Surfaces and Equipment

- Verify the selected agent is approved for use on the target surface/material.
- Check for possible adverse reactions (e.g., corrosion, discoloration, residue).
- Test a small, inconspicuous area if using for the first time.

7. Storage Requirements

- Store chemicals in original containers with intact labels.
- Keep storage area dry, cool, and well-ventilated, away from direct sunlight and incompatible products.
- Restrict access to authorized personnel.
- Maintain segregation between chemicals and food/consumable items.

8. Safety Precautions

- Wear appropriate PPE (gloves, goggles, apron, etc.).
- Never mix chemicals unless specified by the manufacturer.
- Ensure proper ventilation during preparation and use.
- In case of spills or exposure, follow emergency procedures as per SDS.
- Dispose of expired or unused chemicals in compliance with regulations.

9. Documentation & Record-Keeping

- Document product names, lot numbers, concentrations, and dates of preparation/use.
- Maintain training records for staff handling chemicals.
- Log cleaning and sanitizing activities in cleaning schedules/forms.

10. References & Related Documents

- Product manufacturer instructions and Safety Data Sheets (SDS)
- Relevant regulatory guidelines (e.g., FDA, EPA, local authorities)
- Internal cleaning schedules and checklists