

Standard Operating Procedure (SOP)

Sanitizer Preparation, Dilution, and Contact Time Verification

This SOP details the procedures for **sanitizer preparation, dilution, and contact time verification**, ensuring the correct concentration of sanitizing solutions is achieved and maintained for effective microbial control. It includes guidelines for selecting appropriate sanitizers, accurate dilution methods, verification of contact time to maximize disinfection efficacy, safety precautions during handling, and documentation requirements to comply with health and safety standards.

1. Purpose

To outline standardized procedures for preparing, diluting, and verifying contact times for sanitizers, ensuring efficacy and safety.

2. Scope

This SOP applies to all personnel responsible for sanitation in the facility, including janitorial, food safety, and quality assurance teams.

3. Responsibilities

- **Supervisors:** Ensure staff are trained and SOP compliance is monitored.
- **Staff:** Follow procedures and complete documentation accurately.
- **Quality Assurance:** Verify concentrations and maintain records.

4. Materials and Equipment

- Approved sanitizer(s) (e.g. chlorine, quaternary ammonium, peracetic acid)
- Measuring containers or graduated cylinders
- Personal protective equipment (gloves, safety goggles, apron)
- Test strips or digital meters specific to the sanitizer
- Clean dispensers or spray bottles
- Documentation log or checklist

5. Procedure

1. **Sanitizer Selection:**
 - Review facility list of approved sanitizers and their use cases.
 - Check expiration date and integrity of sanitizer container.
2. **Preparation & Dilution:**
 - a. Consult manufacturer's instructions or facility guidelines for correct dilution ratio.
 - b. Wear appropriate PPE prior to handling chemicals.
 - c. Add measured sanitizer to designated clean water using measuring container.
 - d. Mix solution thoroughly.
3. **Concentration Verification:**
 - Use appropriate test strips/digital meters to verify concentration after mixing.
 - If concentration is incorrect, adjust as needed and re-test.
 - Record results on the log sheet.
4. **Contact Time Verification:**

- Refer to manufacturer's label for recommended contact time (e.g., 1–10 minutes).
- Ensure surface remains visibly wet for entire recommended contact time.
- Document the time sanitizer was applied and removed (if applicable).

5. Post-Use Practices:

- Dispose of unused sanitizing solution as per local regulations.
- Rinse or clean equipment as required.

6. Safety Precautions

- Always wear appropriate PPE (gloves, goggles, apron) when handling concentrated chemicals.
- Prepare sanitizers in well-ventilated areas.
- Never mix different types of chemicals.
- Store chemicals securely and away from food or incompatible substances.

7. Documentation and Records

- Log the following for each batch:
 - Date & time of preparation
 - Type and concentration of sanitizer
 - Name of preparer
 - Results of concentration/efficacy tests
 - Contact time verification
- Store completed logs for minimum retention period as per facility policy.

8. References

- Manufacturer SDS and instructions for each sanitizer
- Local and federal health safety guidelines

Revision History

Date	Revision	Description	Approved By
2024-06-30	1.0	Initial release	QA Manager