SOP: Approved Cleaning Agents and Disinfectants for Specific Equipment Types

This SOP details the use of **approved cleaning agents and disinfectants** tailored for specific equipment types, ensuring effective sanitation without damaging tools or machinery. It outlines criteria for selecting agents based on equipment material and function, application methods, safety precautions, and compliance with health standards. The procedure aims to maintain hygiene, prevent cross-contamination, and prolong equipment lifespan through appropriate cleaning practices.

1. Purpose

To provide standardized procedures for selecting and applying approved cleaning agents and disinfectants for various equipment types, ensuring effective hygiene and maintaining equipment integrity.

2. Scope

This SOP applies to all personnel responsible for cleaning equipment in the facility, including but not limited to production, laboratory, and maintenance staff.

3. Responsibilities

- Staff: Execute cleaning according to this SOP.
- Supervisors: Verify use of correct agents and ensure compliance.
- Quality Control: Approve cleaning agents and monitor adherence.

4. Criteria for Selection of Cleaning Agents and Disinfectants

- Compatibility with equipment material (e.g., stainless steel, plastic, glass)
- Effectiveness against targeted contaminants
- Residue-free after rinsing
- Compliance with local health and safety regulations
- Manufacturer's recommendations

5. Approved Cleaning Agents and Disinfectants by Equipment Type

Equipment Type	Material	Approved Cleaning Agents	Approved Disinfectants	Precautions
Production Machinery	Stainless Steel	Mild alkaline detergent Non-abrasive cleaner	70% Isopropyl Alcohol Sodium hypochlorite (0.5%)	Avoid excessive moisture; rinse thoroughly to prevent corrosion
Laboratory Glassware	Borosilicate Glass	Neutral pH detergent Autoclave-safe soaps	Autoclaving Hydrogen peroxide (3%)	Pre-rinse to remove residues; handle hot glass with care
Plastic Equipment	Polypropylene, Polycarbonate	Mild dish soap Enzymatic cleaners	Quaternary ammonium compounds Hydrogen peroxide (3%)	Avoid strong solvents; do not use high heat unless specified
Touchscreens & Electronic Devices	Glass/Plastic	70% Isopropyl Alcohol wipes	UV-C disinfection (where applicable)	Do not spray directly; use lint-free wipes

6. Cleaning Application Methods

- Manually clean with lint-free cloths, mops, or sponges as specified.
- Immerse small items if safe; follow immersion time per agent instructions.

- Apply disinfectants after cleaning, allow appropriate contact time as per label.
- Rinse thoroughly if required, especially on food-contact surfaces.

7. Safety Precautions

- Wear appropriate PPE: gloves, goggles, lab coat/apron.
- Work in a well-ventilated area.
- Follow SDS and manufacturer's guidelines for storage, handling, and disposal of agents.
- Report any allergic reactions or accidents immediately.

8. Compliance and Documentation

- Record each cleaning/disinfection activity: date, equipment, agent used, staff initials.
- Check and document agent expiry dates regularly.
- Retain records for audit and inspection purposes.

9. References

- Equipment manufacturer manuals
- Safety Data Sheets (SDS)
- Local and international health standards (e.g., CDC, WHO)