

Reprocessing reusable instruments and equipment

A guide to AS 5369:2023 Spaulding's Classification Scheme

All reusable instruments and equipment used in personal appearance services must undergo reprocessing between clients to prevent infections.

This quick reference guide has been developed to assist operators in understanding their obligations and requirements for reprocessing reusable instruments, equipment, and jewellery (items). This document must be read in conjunction with the [Infection control guidelines for personal appearance services](#) (the Guidelines) and *Australian Standard 5369:2023 Reprocessing of reusable medical devices and other devices in health and non-health related facilities* (AS 5369:2023).

Operators must ensure that staff involved in reprocessing have received adequate education on reprocessing (e.g., completion of a course) and training on the specific operation of any reprocessing equipment used in the business.

Reprocessing in personal appearance services

The minimum reprocessing requirements may include pre-cleaning, cleaning, disinfection or sterilization. Operators must only reprocess reusable items if the requirements set out in the current standard (AS 5369:2023) can be met. Items labelled single-use must not be reprocessed and must be discarded after use.

Cleaning

- Cleaning involves the removal of residual soil and organic matter. All reusable items must undergo a thorough pre-cleaning and cleaning process.
- Cleaning may be undertaken manually or using an automated cleaner – refer to the Guidelines for further details on these cleaning methods.
- Thorough cleaning must be undertaken before moving to the specified disinfection/sterilization step. If an item is not clean, the disinfection/sterilization process will not be effective.
- If an item cannot be cleaned, or the cleaning cannot be undertaken in accordance with the manufacturer's instructions, then the item cannot be reprocessed and alternatives such as sterile single-use items must be used.

Disinfection

- Disinfection inactivates or kills microorganisms using heat, light or chemical agents. Disinfectants are classified as low-level, intermediate-level or high-level in terms of their antimicrobial activity. Follow the manufacturer's instructions when using disinfectants.
- AS5369:2023 requires chemical disinfectants used for reprocessing reusable items to be labelled as an 'instrument grade disinfectant'. Most labels will specify whether the instrument grade disinfectant is low, intermediate or high level. If you are unsure, speak with your chemical supplier.

- Other classes of disinfectants such as those labelled ‘hospital grade’ or ‘household grade’ must not be used for reprocessing reusable items but may be used for other purposes within the business such as cleaning floors.

Sterilization

- Sterilization is a process which destroys all microorganisms from the internal and external surfaces of the item.
- There are three principal sterilization processes – moist heat, low temperature and dry heat. Moist heat (steam under pressure) is the preferred process for sterilization of reusable instruments, where compatible with the item.
- Sterilization involves:
 - *packaging*: packaging using appropriate materials and techniques, use of appropriate indicators and labelling
 - *cycle operation*: loading the sterilizer in accordance with the manufacturer’s validated method, running the cycle, unloading the sterilizer and storing items in a manner that prevents contamination
 - *records and verification*: verifying the parameters, such as temperature, time and pressure were attained for the cycle, completing all required records
 - meeting all scheduled cleaning, maintenance, water, calibration and validation requirements as per the manufacturer’s instructions and AS 5369:2023.

For reusable items used in personal appearance services, the reprocessing level is determined by the risk of infection associated with the item’s intended use and the manufacturer’s instructions. Under the Spaulding’s Classification Scheme, reusable items are classified as critical, semi-critical, or non-critical.

Refer to **Table 1** for detailed guidance on the minimum reprocessing requirements.

Summary of reprocessing steps

- Pre-cleaning (**all items**): rinse immediately after use, followed by pre-cleaning in an ultrasonic cleaner (if used by the business)
- Cleaning (**all items**): manual scrubbing followed by rinsing and drying or processing in an automatic washer/disinfector. Items must be visually inspected before moving to the next reprocessing step.
- If the item is a **critical** item or a **semi-critical** item *capable* of withstanding sterilization (moist heat or low temperature): package and sterilize in accordance with the manufacturer’s instructions. Parameters must be verified; these will be method dependant such as temperature, time and pressure for steam sterilization, and records completed.
- If the item is **semi-critical** and *unable* to withstand sterilization: high-level disinfection using a thermal disinfection process (washer-disinfector) or using an instrument grade high-level disinfectant in accordance with the manufacturer’s instructions. The temperature of the disinfectant, contact time and final rinse volume must be recorded to validate the manual high-level disinfection process.
- If the item is **non-critical**: a low or intermediate-level disinfection process can be undertaken if required by the manufacturer’s instructions or an internal business policy.

Table 1 Minimum reprocessing requirements in accordance with Spaulding’s Classification Scheme

| | Definition | Type of reprocessing required | Further details |
|----------------------|--|---|--|
| Critical device | An item intended to be introduced directly into or have contact with the vascular system (blood and blood vessels). Example: instruments used for ear pointing, tongue forking or splitting. | <i>The item, including any tray or receptacles holding sterile items, must be sterilized.</i> Pre-cleaning and cleaning, followed by sterilization: <ul style="list-style-type: none"> • Moist heat sterilization; or • Low-temperature sterilization | <ul style="list-style-type: none"> • Monitoring and control measures must be undertaken at each reprocessing step. • Reprocessing records must be maintained for all steps, including cleaning – refer to Section 16, the Guidelines. • Only disinfectants labelled ‘instrument-grade’ must be used for reprocessing. • Sterilizers and thermal disinfection equipment must be validated and maintained in accordance with AS 5369:2023 and the manufacturer’s instructions for use. |
| Semi-critical device | An item that comes into contact with mucous membranes or non-intact skin such as the mouth, nose and genitals. Example: tweezers (when used to expose and remove ingrown hairs), clamp used for genital or tongue piercing. | <i>Items must be sterilized (if compatible with the item).</i> Pre-cleaning and cleaning, followed by sterilization: <ul style="list-style-type: none"> • Moist heat sterilization; or • Low-temperature sterilization <i>If items are unable to withstand sterilization, items must undergo high-level disinfection consistent with the manufacturer’s instruction.</i> Pre-cleaning and cleaning, followed by high-level disinfection: <ul style="list-style-type: none"> • Thermal disinfection (washer-disinfector); or • The use of an instrument grade high-level disinfectant: this agent kills all microbial pathogens, except large numbers of bacterial spores. | |
| Non-critical device | An item that comes into contact with intact skin but not mucous membranes. Example: nail clippers, makeup brushes *Items accidentally contaminated with blood require thorough cleaning and disinfection with an intermediate-level disinfectant. If an intermediate-level disinfectant is not available a high-level disinfectant is required to be used. | <i>Thorough cleaning is sufficient for most non-critical items.</i> If required, following pre-cleaning and cleaning, non-critical items can undergo low or intermediate* disinfection: <ul style="list-style-type: none"> • Low-level disinfectant: destroys all vegetative bacteria, some fungi and some viruses but does not kill bacterial spores. • Intermediate-level disinfectant: kills vegetative bacteria, mycobacteria, viruses and most fungi but does not kill bacterial spores. | |



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