Fact Sheet for Health Care Professionals

Safe use of *ortho*-phthalaldehyde

Ortho-phthalaldehyde (OPA) is an instrument-grade high level disinfectant used to reprocess semi-critical reusable medical devices (RMDs). Commercial preparations include Cidex® and Opal®.

When used correctly, OPA has broad antimicrobial activity against all microorganisms except for large numbers of bacterial endospores.

Recommendations for Use

OPA can be used for both manual and automated disinfection. Where OPA is used manually, containers must be made from a compatible material and of sufficient dimensions to fully immerse RMDs. Where OPA is used in automated disinfection such as in an automated flexible scope reprocessor, the use of the OPA product must be validated according to the reprocessing equipment manufacturer's instructions for use (IFU).

Prior to OPA disinfection, RMDs must be fully cleaned according to their IFU. Also refer to the organisation's reprocessing policies and *AS5369:2023 Reprocessing of reusable medical devices and other devices in health and non-health related facilities*.

OPA solutions may be re-used for a period specified by the manufacturer. During that time, the solution must be tested prior to every use to ensure it remains above the Minimum Effective Concentration (MEC). OPA manufacturers provide test strips to indicate if the solution is at its MEC. Solutions which do not pass a MEC test have lost their efficacy and must be discarded.

Product suitability & safety

OPA solution is not suitable for use on critical RMDs i.e. those which enter sterile tissues. Critical RMDs must be used sterile according to the Spaulding classification system – refer to *AS5369* or consult local infection control professionals for further guidance.

If questions arise regarding the compatibility of a RMD with OPA solution, contact the RMD manufacturer.

Some products warn against the use of OPA on RMDs intended for patients with chemical sensitivities, or in certain surgical procedures. Check the IFU for any contraindications.

Rinsing RMDs after disinfection

Always follow the RMD manufacturer's IFU for rinsing, as OPA solution may remain on the device. Inadequate rinsing may result in chemical burns, irritation and/or staining of the skin and mucosa of patients.

Purified water must be used to rinse RMDs after manual disinfection per *AS5369:2023*. Consult local infection control professionals to determine water treatment methods at the point of use.

User safety

Personal Protective Equipment (PPE) including a full-face visor must be worn throughout the use of OPA to prevent contact with the skin and eyes. Note: Contact lenses may absorb or concentrate irritants. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as possible.

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A safety data sheet (SDS) with directions for safe use, including directions for the management of spills, storage and handling of the chemical, must be readily available at the point of use.

Selection of gloves for disinfection using OPA should consider the following:

- Appropriate length for immersion of RMDs in OPA solution
- Material thickness & dexterity
- Chemical resistance appropriate to duration of contact with OPA

OPA solution must be used in a well-ventilated area, and sprays, mists and aerosols must not be generated during use. Consult Workforce Health to determine whether a local exhaust hood or portable ventilation device containing OPA-absorbent media is required.

Containers used for manual disinfection must have tight fitting lids and must be filled and emptied in a manner which reduces the risk of spills and personal exposure. Automated dispensing systems are available that reduce manual handling of OPA.

Users must be competent in RMD reprocessing and trained to follow the manufacturer's IFU. Records of training and competency must be maintained and regularly reviewed.

Disposal Information

Disinfectant Disposal

OPA solutions must be rendered non-toxic prior to discarding them to sewer. Glycine powder or an approved neutralising agent must be used according to the manufacturer's IFU. The concentration of active OPA remaining in treated waste must not exceed 200 mg/L.

OPA solution **DOES NOT** need to be neutralised if it is used in an automated endoscope reprocessor as a **SINGLE USE** disinfectant, providing the final concentration of OPA in the discharge does not exceed 200mg/L. Consult the equipment manufacturer for further advice.

Container Disposal

Do not reuse empty OPA product containers. Dispose of the container in accordance with facility policy and the Environmental Protection Authority's regulations and guidelines.

References

1. Gastroenterological Society of Australia (GESA). Infection Prevention & Control in Endoscopy 2021. https://www.gesa.org.au/resources/clinical-practice-resources/
2. SA Water. Glutaraldehyde and *Ortho*-Phthalaldehyde disinfectant disposal to sewer https://www.sawater.com.au/__data/assets/file/0015/11409/Glutaraldehyde-and-OPA-disposal.pdf
3. Standards Australia. *AS5369:2023 Reprocessing of reusable medical devices and other devices in health and non-health related facilities.*

For more information

Infection Control Service
Communicable Disease Control Branch
Telephone: 1300 232 272
www.sahealth.sa.gov.au/infectionprevention

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