

# DIAL free radical generator

The most innovative and effective cold sterilization system



CE 0546

## FAST

It cold sterilizes denaturing the protein structure of pathogenic germs in few seconds.

## SAFE

Totally odourless, it does not produce irritating exhalations or vapours.

## COMPATIBLE

It does not damage the instruments.

## ENVIRONMENTALLY FRIENDLY

The spent solution is biodegradable and complies with sewer discharge limits.

## OVERVIEW

DIAL is an absolute innovation in sterilization processes; it enables very fast and effective treatments, while not damaging the instruments and guaranteeing safe protection for the operator and the working environment.

## FIELDS OF APPLICATION

Fast sterilization of heat-sensitive instruments, metal instruments, fibre-optic instruments and daily-use medical devices.

## ACTIVE SUBSTANCE AND MECHANISM OF ACTION

Free radicals with reducing action in basic-pH aqueous solution. Transfer of electrons that generate chemical reactions with irreversible damages to the structure of pathogenic germs, which are destroyed immediately.

## POWDER COMPOSITION

Buffered oxidizers + activators; they generate a flow of free radicals that can amplify and self-maintain, preventing any reduction of the active substance throughout the stability period.

## ACTION SPECTRUM

Fast and safe action on all pathogenic germs.

In 60 seconds of contact DIAL acts on:

- gram+ and gram- bacteria
- viruses (including HIV-HBV-HCV)
- Mycobacterium tuberculosis
- spores
- fungi

In 60 seconds it can eliminate  $8\log_{10}$  of micro-organisms in vegetative and spore form.

## CHARACTERISTICS AND BENEFITS

### • It sterilizes with a 60-second contact.

The high concentration of free radicals and their ability to amplify and self-maintain in chain reaction enables to perform several sterilizing treatments using the same solution.

• The single-dose vial makes dosage very easy in order to prepare the active solution.

• The powder spontaneously dissolves in ambient temperature tap water by mixing only few seconds. The resulting solution becomes light yellow as a result of the radicals voltage. That is when the operator can start the sterilization.

• The solution does not damage the devices used as the basic pH values and the reducing action of the radicals prevent any damage to instruments.

• The solution is odourless, does not release toxic vapours and does not need hoods or other ventilation systems.

• The powder and the active solution are not sensitising in case of skin contact (avoid eye contact and contact of the powder with wet skin).

• Instruments treated with DIAL do not require usual cleaning (free radicals inactivate immediately in contact with air).

**SOLUTION STABILITY:** 48 hours.

## EXPIRY

Powder effectiveness: 24 months

## DOSAGE

0.25% - 5 g for 2 litres of water

## INSTRUCTIONS FOR USE



**01**  
*Pour the content of 1 vial (5 g of powder) into 2 litres of water (ambient temperature tap water).*



**02**  
*Mix for a few seconds until the powder fully dissolves.*



**03**  
*Wait for the solution to become clear and light yellow. Now the operator can start the activity (about 5 minutes).*



**04**  
*Fully dip clean and dry instruments; remove them after 1 minute; dry with sterile technique.*

**NB:** DIAL does not contain surfactants; any usual movement to facilitate the penetration of the liquid in the cavities or roughness is appropriate after 1 minute of immersion, in the absolute absence of infectious agents. Do not use aluminium containers.

CODE	DESCRIPTION
5220/05	1 box: 15 x 5 g vials

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