



Refrigerating and air conditioning system decontaminants

→ CARLYBIO (Anti Legionella)

04/11



The air conditioning and refrigerating systems can be contaminated by micro-organisms (bacteria, mould, algae...).

The development of these micro-organisms is mainly caused by:

- warm water (20°C to 45°C);
- nutrients in sufficient amount (for instance, the iron salts produced by corrosion);
- the accumulation of organic materials, sediments and other micro-organisms.

A large part of these micro-organisms can be dispersed in the system by water coming from a condensation or de-icing system. Thus they can damage piping, heat exchangers and other surfaces by forming bio-films.

The Legionella Pneumophila bacterium is a micro-organism that can cause severe infections to man.

The water contaminated by the Legionella presents a risk for health when it is dispersed in the air and inhaled by man.

To fight against air conditioning and refrigerating system contamination, the installations must be regularly cleaned-up with CARLYCLEAN, then disinfected with CARLYBIO.

Effective for the surfaces disinfection in the food industry
(Test method phase 2 / step 1 - suspension tests)

■ Applications

- CARLYBIO is suited for disinfection (bacteria, mould, Legionella) of steel, painted, aluminium, copper, plastic - such as PE, PP, PVC, PTFE, PVDF - surfaces of refrigerating and air conditioning installations.
- CARLYBIO is to be used pure on the surfaces to be disinfected.

■ Functional features

- CARLYBIO is very efficient against:
 - **Legionella: NFT 72.301**, under clean condition.
At 10.0 % concentration, the product is still extremely efficient: it destroys all Legionella Pneumophila cells in 5 minutes at 20°C;
 - **Bacterias** (*Pseudomonas aeruginosa*, *Escherichia coli*, *Staphylococcus aureus*, *Enterococcus hirae*): **EN 1276**, under clean condition.
At 1.0 % concentration, the product is still efficient: it destroys all bacteria cells in 1 minute at 20°C;
 - **Fungicides** (*Candida Albicans*, *Aspergillus Niger*): **EN 1650**, under clean condition.
At 50.0 % concentration, the product is still efficient: it destroys all mould spores and the vegetal cells in 15 minutes at 20°C;
- CARLYBIO efficiency reports are available on request.

■ CARLY advantages

- CARLYBIO is effective for the surfaces disinfection in the food industry (Test method phase 2 / step 1 - suspension tests)
- CARLYBIO is compliant with the legislation on the cleaning of foodstuff containers (order of 08/09/1999). For surfaces in contact with foodstuff, a rinse with drinkable water is required.
- CARLYBIO is a strong bactericide and fungicide disinfectant.
- CARLYBIO is a neutral product, non aggressive for surfaces.
- Deodorising product.



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■ Functional features

- CARLYBIO is a biocide, registered by MEDDTL (French Ministry of Ecology, Sustainable Development, Transport and Housing) under the number 23606:
 - Used in private area and public health area disinfectants and other biocidal products (usable PT2 - Directive 98/8/EC),
 - And intended in food and feed area disinfectants (usable PT4 - Directive 98/8/EC).
- Active substance: Quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides - 2.0g / 100g.

■ Directions for use

- Clean the surfaces to be treated with CARLYCLEAN, then rinse with water.
- Spray CARLYBIO on the surfaces of elements to be treated: evaporators, condensate receivers...
- Let the product act during at least 10 minutes, for perfect disinfection.

■ Precautions for use

- * The product can be diluted.
- * It is recommended wearing gloves and protective glasses when using this product.
- * Do not spray onto energized electrical equipment.
- * Do not mix with anionic or chlorinated by-products.
- * Do not swallow.
- * If necessary, wash hands after use.
- * If irritation persists, see a physician.
- * R36/38 Irritant for eyes and skin.
- * S2 Keep away from children.
- * S24/25 Avoid excessive contact with skin and eyes.
- * S35 This material and its container must be disposed of in a safe way.
- * S37 Wear suitable gloves.
- * S46 If swallowed, seek medical advice immediately and show this container or label.
- * **Xi:** Irritant.
- * **Regulation:** For surfaces in contact with foodstuff, a rinse with drinkable water is required (Order of 08/09/1999). The enforced regulation is that of the country where the product is used.
- * **Storage conditions:** Keep the product at temperatures between +5°C and +40°C.
- * To make the CARLYBIO use even easier, CARLY proposes a 5 L pump with a pressure, or CARLYSPRAY (refer to chapter 100).

■ Technical features

CARLY references	Volume (Litres)	Packaging
CARLYBIO 500	0,5	Atomiser
CARLYBIO 5000	5,0	Can
CARLYBIO 25000	25,0	Can



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■ Weights and packaging

CARLY references	Unit weight (kg)	Packaging unit
CARLYBIO 500	0,50	15
CARLYBIO 5000	5,25	2
CARLYBIO 25000	26,00	1