



E-FLOOR Serie 0245 HACCP-CERTIFIED PRODUCT

The Estalia Group, to meet the hygienic and safety standards required by the HACCP protocol, offers **E-FLOOR Serie 0245**, a semi-glossy water-based 2K epoxy coating for industrial cement floors and ceramic tiles. The resulting film, due to its high hardness and firmness, provides oil and grease impermeability and the treated surface is dustproof.

The HACCP protocol (Hazard Analysis and Critical Control Points) was introduced in Europe in 1993 through Directive 43/93/EEC, adopted in Italy through Legislative Decree 155/97; then, the regulation was replaced by **Regulation (EC) No 178/2002 and Regulation (EC) No 852/2004**.

The protocol aims to prevent the occurrence of hygiene and health problems throughout the entire production and distribution chain, to protect consumer health. Environments where food is produced, processed, and distributed must comply with the protocol, and consequently, all their surfaces, including walls, ceilings, and floors, must be painted with certified and suitable products that allow for easy cleaning and disinfection, so as not to alter the chemical and biological composition of the food present and to avoid possible contamination. Places subject to this self-control system such as bars, cafeterias, restaurants, shops, warehouses, factories, dairies, and similar establishments.

For these reasons, the paints used in these environments must meet the following characteristics:

- Absence of harmful substances in the formulation
- Resistance to abrasion and general mechanical stress
- Low water permeability
- · Good resistance to cleaning detergents
- Easy clieaning
- Durability superior to standard wall paints

For a paint to be certified according to HACCP, it must have passed the tests relating to the essential requirements of dirt pick-up and odour release and, among the unique requirements, either the washability and cleanability tests or the mould resistance tests.

AQUAFLOX Series 2184 has obtained HACCP certification as it has passed the afore mentioned tests:

Essential Requirements:

- Dirt Retention (UNI 10792):
 - Method for evaluating the tendency of a wall paint film to keep exceptionally fine pigment particles. This measurement allows for assessing the tendency of the applied paint to absorb and keep dust and impurities.
- Odor Emission (UNI 11021 Appendix A):
 - Method for deciding the emission of odor from paints, varnishes, and related products in environments with the presence of food.

Specific Requirements:

- Wash Resistance (UNI 10560):
 - Method for finding the number of washing cycles with a brush and surfactant solution that cause the removal of the paint film and the next exposure of the substrate.
- Cleanability (UNI 11021 Appendix B):
 - Method for finding the cleanability of paints, varnishes, and comparable products.





- Resistance to Specific Washing Agents (UNI 11021):
 Method for figuring out resistance to washing agents, which can be simulated by test liquids: detergent A (chloractive), detergent B (alkaline degreaser), and detergent C (acid cleaner).
- Resistance to Disinfecting Agents (UNI 11021):

 Method for testing all surfaces that by law must be disinfectable or where resistance to disinfecting agents is required. The agent can be simulated using test liquid detergent D (disinfectant).

The results obtained for E-FLOOR Serie 0245 are reported in the following table:

ESSENTIAL REQUIREMENTS				
TEST	TEST METHOD	CLASSIFICATION RANGE	RECORDED VALUE	RESULT
Dirt Retention	UNI 10792	Extremely low: $\Delta L \le 3$ Low: $3 < \Delta L \le 9$ Medium: $9 < \Delta L \le 15$ High: $\Delta L > 15$	< 0,5	EXTREMELY LOW
Odor Emission	UNI 11021, App. A	≤1	< 0,5	POSITIVE
	S	PECIFIC REQUIREMENTS		
TEST	TEST METHOD	CLASSIFICATION RANGE	RECORDED VALUE	RESULT
Wash Resistance	UNI 10560	Excellent resistance ≥ 5000 cycles Resistant 1000 ≤ cycles < 5000 Non resistant < 1000 cycles	> 5000 Cycles	EXCELLENT WASH RESISTANCE
Cleanability	UNI 11021, App. B	ΔE ≤ 3	< 0,5	POSITIVE
Resistance to Specific Washing Agents	UNI 11021	No alteration caused by detergents A, B, and C	No alteration caused by detergents A, B, and C	POSITIVE
Resistance to Disinfecting Agents	UNI 11021	No alteration caused by detergents D	No alteration caused by detergents D	POSITIVE

E-FLOOR Serie 0245 can therefore be used in food contact environments throughout the entire production and distribution chain.





The characteristics that distinguish it are:

- Extremely easy to apply with brush and roller
- Excellent resistance to stain penetration
- Excellent coverage and yield
- Low content of VOCs (Volatile Organic Compounds)

The series is ideal for painting environments and floors where the deposit, storage, processing, and serving of food occurs, such as cafeterias, food industries, industrial kitchens, warehouses, food laboratories, bars, restaurants, and dairies.

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THE TECHNICAL MANAGEMENT

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