

# ULTRADIFFUSION®

ULTRADIFFUSION® is a *non-pyrotechnic, slow combustion* technology *diffusing active substance* in the air thanks to the thermokinetic effect. ULTRADIFFUSION® enables uniform, very high density diffusion in the whole volume of the room to be treated, including hard-to-access zones, with precise dose to volume adjustment.

Since Fumispore® first saw the light of day in 1963, ULTRADIFFUSION® has undergone continual improvement by LCB food safety's R&D staff and is the subject of several patents.

ULTRADIFFUSION® offers an alternative that pays greater respect to the toxicological and ecotoxicological issues than other methods, without compromising efficacy.

## EFFICIENT

Homogeneous dispersion & optimal particle size:

- Prolonged contact time with airborne contaminants
- 3D dispersion, reaching hard to access zones
- Homogeneous dose delivery

## VERSATILE & COST EFFECTIVE

- Precise dose adaptation, according to the volume to be treated: pre-dosed canisters
- Ready to use (*no specific equipment needed*)
- No water needed

## SAFE

- Slow and non-pyrotechnical wick
- Does not necessitate the operator to be in the room during the application process
- No risk of corrosion for your valuable equipment
- Limitation of residue in disinfection applications

## SIMPLE & EASY-TO-USE :

### A 4 STEP PROCESS

1  
FLIP OVER THE  
CANISTER  
SEVERAL TIMES



2  
OPEN THE CANISTER  
AND PLACE IT ON A  
HEAT RESISTANCE  
SURFACE



3  
LIGHT THE FLAME



4  
THE ACTIVE SUBSTANCE RISES  
UP, LEAVING THE OPERATOR  
TIME TO EXIT THE ROOM.  
IT IS PROPELLED BY A SLOW,  
NON-PYROTECHNIC  
COMBUSTION



PROCESSING PLANT

STORAGE TANKS & SILOS

PACKING ROOM

AIR TREATMENT UNIT

# ULTRADIFFUSION®

## THE TECHNOLOGY THAT MAKES THE DIFFERENCE ACROSS APPLICATIONS

ULTRADIFFUSION® has been used for 50 years in more than 50 countries for high-effectiveness fungicide, bactericide, virucide or insecticide applications, as well as for animal welfare with essential oils. Our experts are committed to offering you the best response for preserving food safety every step of the way from farm to fork.

### APPLICATION IN SURFACE DISINFECTION - MODE OF ACTION

1 EMISSION



The active substance rises up leaving the operator time to exit the room. It is propelled by slow, non-pyrotechnic combustion time.

2 DISPERSAL



The active substance gradually covers the whole volume of the room, starting with the ceiling.

3 EXPANSION



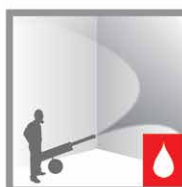
In less than an hour, several billion components reach into the deepest nooks and crannies and come into contact with any micro-organism that are present.

4 SEDIMENTATION



Between 4h and 8h the components have sedimented enabling the active substance to prolong its action in the place it was deposited.

### AIRBORNE DIFFUSION TECHNOLOGIES



	ULTRADIFFUSION®	FOGGING	THERMO FOGGING	FUMIGATION (GAS)	PYROTECHNIC FUMIGANT
<b>ACTION</b>	<i>Bacteria/Fungus</i> <i>Insects</i>	Bacteria Insects	Bacteria Insects	Bacteria Insects	Fungus Insects
<b>UNIFORM ACTIVE SUBSTANCE DIFFUSION</b>	Yes	No	Variable	Variable	No
<b>OPTIMAL CONTACT TIME*</b>	Yes	No	Variable	Variable	No
<b>READY TO USE</b>	Yes (pre-dosed canisters)	No	No	No	Yes
<b>RISK OF CORROSION</b>	No	Yes	Yes	Yes	No
<b>COMBUSTION OF THE WICK</b>	Slow non-pyrotechnic	None	None	None	Quick Pyrotechnical
<b>COMBUSTION REACTION</b>	Controlled	None	None	None	Violent
<b>OPERATOR EXPOSURE</b>	No (slow diffusion)	Yes	Yes	Yes	Yes
<b>DOSING ACCURACY AND REPRODUCIBILITY</b>	Yes	No	No	Yes	Yes

\*Optimal contact time measure:  
measured by the natural thermokinetic  
speed of particles after ultradiffusion® in  
comparison with other technologies