

## NEW Inner-outer sport cap sterilization with pulsed light

**Adopt Aptar UNO cap**  
and benefit from the chemical free Claranor process

### Microbiological test results :

> 4,6 LOG REDUCTION on *Aspergillus brasiliensis*

Voltage	Flash n°1	Mean Log reduction
3000 V	1	> 4,6
	2	> 4,6

Results showed that using 2500 V and only 1 flash was enough to inactivate all conidiospores on the 3 colors of cap.

### Application

- ESL >60 days (neutral & high acid), flavoured milk, liquid yogurt, juices
- Ambient high acid products: non carbonated & preservatives free soft drinks, fruit juices ...
- Adapted to Class IV VDMA

Aptar & Claranor, benefit from a close partnership  
**Packaging and process can contribute to your corporate commitments in sustainability**



**Contact :** Nathalie JUDE, Director Market Development EMEA Beverage  
nathalie.jude@aptar.com

Anthony HERENG, Sales Manager  
ahereng@claranor.com



## NEW Inner-outer sport cap sterilization with pulsed light

Adapted for ESL>60 days and high acid aseptic lines



Aptar UNO 38 mm sport closure Pulsed light homologation

## UNO by Aptar, 38 mm one piece sport closure



**Aptar UNO new format, developed for juice & dairy beverages**, provides the beverages producers with an innovative solution answering to new consumer needs : The closure is easy to open and close, for young and old consumers.

### Features

- 38 mm PP 2s and 3s
- One-piece flip top, 7 mm orifice
- Active hinge
- Dual tamper evidence
- Range of standard colors, custom colors on demand

### Benefits

- Convenient on-the-go drinking
- Lightweight and efficient design
- Proven, safe and market accepted tamper system

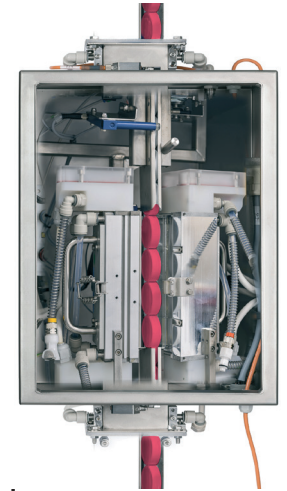
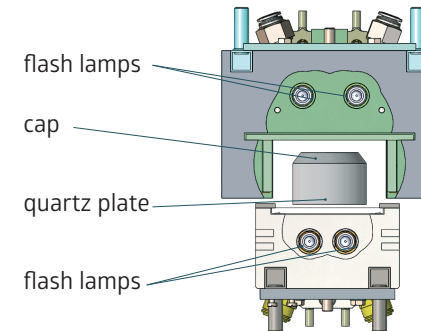


Aptar, delivering solutions, shaping the future

## Claranor Puls'Full Cap® sterilization

**Microbiological test objective** : Validate the efficiency of a flash lamp system regarding the **decontamination of the inner surface in contact with the product, the thread and plug seal, the inner surface of the cover.**

POSITION OF THE CAP DURING THE FLASH



### Claranor equipment :

- 1 reflector with 2 xenon lamps for the inner treatment.
- 1 reflector with 2 xenon lamps for the outer treatment.

### Test modality

- VDMA code of practice
- Conidiospore : *Aspergillus brasiliensis*
- 2500 V / 1 flash or 2 flashes
- Inoculated caps were placed on the quartz plate

### Advantages

- Compact (600mm high)
- Instant treatment
- Speed lines up to 60 000 bph
- **No chemical, No residue**

