



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



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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





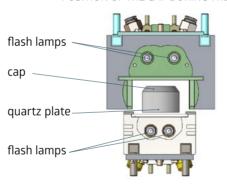


Aptar, delivering solutions, shaping the future

Claranor FULLCAP® 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



Test modality

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













Claranor equipment:

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

Advantages

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

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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 conidispores on the 3 colors of cap.

Application

- · ESL >60 days (neutral & high acid), flavoured milk, liquid yogurt, juices
- $\cdot \ \text{Ambiant high acid products: non carbonated \& preservatives free soft drinks, fruit juices \dots}$
- · Adapted to Class IV VDMA

Aptar & Claranor, benefit from a close partnership

Packaging and process can contribute to your corporate commitments in sustainability



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Pulsed Light Sterilization

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