PULSED LIGHT DECONTAMINATION OF APTAR NEO CLOSURE

MEET HIGHER HYGIENIC STANDARDS

Adopt Aptar Neo closure and benefit from the chemical free Claranor process

Microbiological test results:
> 3,5 LOG REDUCTION on Aspergillus brasiliensis

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Flash number</th>
<th>Mean Log reduction</th>
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</thead>
<tbody>
<tr>
<td>3000 V</td>
<td>1</td>
<td>= 3,5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>&gt; 3,5</td>
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</tbody>
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Only one flash to get > 3 log reduction

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

Contact: Marianne BARET, Director Market Development EMEA Food
marianne.baret@aptar.com

Contact: Anthony HERENG, Sales Manager
ahereng@claranor.com

Aptar NEO closure Pulsed light validation
Aptar innovative concept dedicated to the infant formula powder:
Flip top with in-mold spoon equipped with Flex band can attachment system

Features
- 127 & 99mm PP closure
- One-piece flip-top in-mold spoon
- Integrated spoon holder and leveller bar
- Active hinge
- Tamper evidence
- Range of standard colors, custom colors on demand
- Custom spoon size on demand
- Flex band can attached system

Benefits
- Out of Powder storage for an easy hygienic storage
- Intuitive scoop leveller for right or left hand consumer
- Audible ‘click’ when opening & closing
- High capping flexibility & performance 360°
- Protection against pest ingress
- Recycling stream improvement

Cap sterilizer
1 reflector Claranor Essential®/2 xenon lamps

Claranor pulsed light sterilization

Microbiological test objective: Validate the efficiency of a flash lamp system regarding the decontamination of all the surface located under the spoon of the Aptar Neo closure.

Test modality
- VDMA code of practice
- Conidiospore: Aspergillus brasiliensis
- 3000 V / 1 or 2 flashes
- Inoculated caps were positioned at 10 mm underneath the flash lamp

Advantages
- Dry sterilization
- Compact & easy to integrate on existing or newline
- Instant treatment
- No residue
- Low & Medium speed line

Claranor equipment