

# GOLDFLAM SYN

Flame retardant finishing agent for synthetic fibers with fastness to washing and resistant to cleaning with organic solvents.

## Fields of application:

- Application in continuous process for textile substrates used in automotive and decoration areas, where there is a need to fastness to washing.

## Features and benefits:

- Easy bath preparation.
- It provides a suitable touch and fabric drape.
- The physical properties for the treated textiles are preserved.
- The effects of fastness to washing are preserved even with a high temperature washings.
- Without subsequent singeing.

## Physicochemical parameters:

|                               |  |
|-------------------------------|--|
| Aspect                        | Translucent colorless liquid.  |
| Chemical nature               | Phosphate ester.   |
| Relative density (g/ml, 25°C) | Approx. 1.28   |
| Ionic character               | Not determined.  |
| Nonvolatile content (%)       | 91.0 – 95.0  |
| Compatibility                 | GOLDFLAM SYN is compatible with most chemical products used for finishing. Shade and light fastness can be affected. It is recommended previously tests. |
| Storage stability             | The product stability is conditioned to the use and storage.   |

## Application:

- The substrates to be treated with GOLDFLAM SYN must be absorbent and free of alkali and others foreign substances.
- GOLDFLAM SYN is applied in impregnation, drying, thermosol and soaping process and their performance improves if is applied together with Goldwet NE due to a better substrate wetting.
- It is necessary a good uniformity in the application of the product on the substrate surface.
- GOLDFLAM SYN is used in the treatment of polyester to reach a durable flame retardant finish, thus satisfying a wide range of standards as described below:

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| Standards             |   |
|-----------------------|---|
| <b>Australia</b>      | Curtains, AS 1530: Part 2   |
| <b>EC</b>             | Airline Furnishings, CAA 8/2<br>Automotive Fabric, ISO 3795<br>Mattress Tickings, EN 597<br>Bedding. EN ISO 12952 - 1,2,3,4 |
| <b>France</b>         | Curtains, Class M1 of NFP 92 - 503  |
| <b>Germany</b>        | Curtains, DIN 4102 B1 and B2, DIN 66082   |
| <b>Italy</b>          | Curtains, CSE RF1/ 75, CSE RF 2 / 75, CSE RF 3 / 77   |
| <b>Spain</b>          | Curtains, UNE 23.727  |
| <b>United Kingdom</b> | Curtains, BS 5867, Part 2 Types A and B<br>Wall coverings, BS 476 Parts 6 and 7<br>Bedding, BS 7175                         |
| <b>United States</b>  | Curtains, NFPA 701<br>Airline Furnishings, FAR 25.853<br>Automotive Fabric, FMV SS 302                                      |

## Quantity of product required:

The quantity of product required depends on the type of fiber, weight/m<sup>2</sup> and fabric construction.

Tight and dense fabric will need a less quantity of GOLDFLAM SYN compared to lightweight and open construction fabric. In this case, we can analyze and suggest the better recipe.

## Recipe suggested:

**Flame retardant finishing for synthetic substrates:**

100 - 500 g/L GOLDFLAM SYN.

## Process:

- Prepare a bath with the optimal application concentration of GOLDFLAM SYN and Goldwet NE.
- Adjust the bath pH to 6.0 – 6.5 with disodium phosphate or sodium carbonate.
- Apply at room temperature in continuous process with pick-up 40-60%, ensuring a good impregnation and distribution of the bath on the substrate.
- Dry at 110 - 135°C. It can be used an Infrared (IR) pre-dry.
- Polymerize at 185 - 205°C for 1-2 minutes. The treatment efficiency may vary with a temperature.
- Wash with cold water to eliminate the excess of product deposited superficially that may affect the substrate touch.

For data of security, ecological and toxicological, see the Safety Data Sheet (SDS).

Note: Given the variety of substrates and applications processes, the information provided with fidelity should be understood as a guidance tool, therefore we cannot be responsible for any damages resulting from an inappropriate use. The data contained in this technical informative are based on current knowledge and applications of our products performed. Additional information can be obtained from our technical department. Review: 19/03/2018.

**Golden**  
TECNOLOGIA