

*protect your values*



# High-performance intumescent coatings for aircraft

PYRO-SAFE® DG-HF • PYRO-SAFE® DG-HF 180

qualified by AIRBUS

*safety via technology*

## PYRO-SAFE® DG-HF and PYRO-SAFE® DG HF 180 Fire retarding coatings qualified by AIRBUS

PYRO-SAFE DG-HF and PYRO-SAFE DG-HF 180 are the first intumescent fire retarding coatings for aircraft applications qualified by AIRBUS. They are used as fire-resistant coatings to improve the material performance in the case of fire and to provide increased resistance to fire.

### Characteristics

At temperatures starting at +150 °C for PYRO-SAFE DG-HF and at +180 °C for PYRO-SAFE DG-HF 180, the coatings form a protective insulation layer with a high foaming pressure and an up to 37-fold expansion rate. Due to reaction levels at different stages of fire impact, a stable coherent protective compound will be developed. Special substances stabilize and glue the high temperature stable graphite inclusions together, thus providing for effective fire protection.

### Product features and handling

The single-component aqueous dispersions can be supplied with customised viscosity properties. Due to moisture and UV resistance they can be used in a wide range of indoor and outdoor applications. The flexible and elastic coatings offer an excellent adhesion on timber, metal, plastic and fabric-based materials.

The application range lies between -55 °C and +120 °C. PYRO-SAFE DG-HF is used in areas with ambient temperatures of up to +70 °C, PYRO-SAFE DG HF 180 can be used at correspondingly higher ambient temperatures.



PYRO-SAFE DG-HF and PYRO-SAFE DG-HF 180 are preferably applied by spraying gun and offer very high resistance to mechanical impact after drying. The surface has a rough structure due to the particle sizes of the expandable graphite. If a smoother surface structure is required, the formula variant PYRO-SAFE DG-AAF is available; the qualification process is in progress currently.

The intumescent coatings are available in colours anthracite, grey, black or red. Moreover it is possible to cover them additionally with approved PU paints in various colours.

### PYRO-SAFE DG-HF and PYRO-SAFE DG-HF 180 at a glance:

- Qualified by AIRBUS FAR/CS 25.856 (b)
- Intumescent coatings based on expandable graphite
- VOC content clearly below the limitation values specified in Chem VOC Paint V (2001/24/EC)
- Moisture and UV resistant
- Viscoplastic
- Resistant against many chemicals
- High resistance to mechanical impact
- Customized viscosity adjustment possible
- Application possible on many different material surfaces (metal, timber, plastic, fabric)
- Early and rapid foaming at +150 °C / +180 °C
- High foaming pressure
- Up to approximately 37-fold expansion rate



### References

Our individually developed coatings have already been successfully used in various applications in the aircraft industry by AIRBUS, e.g. in the series AIRBUS A320neo, AIRBUS A330neo, AIRBUS A350 and AIRBUS A380.

AIRBUS uses PYRO-SAFE DG-HF in cargo compartment floors, for ceiling ducts, air inlet and outlet openings and seating elements. The aim is to provide burnthrough protection and simultaneously reducing weight. Structural elements can, for instance, be lighter and with a filigree design if fire protection requirements necessitate higher material thickness.

### Efficient fire protection solutions

The svt Group of Companies is one of the leading players in structural fire prevention and damage restoration. More than 500 employees in 29 locations ensure the company's increasing success.

With many years of experience as developer of fire prevention systems and manufacturer of insulating and ablative coatings, some years ago svt decided to develop products to meet the increasing demands for fire prevention in the rail vehicle and aircraft sectors.

Our vast know-how, the broad product portfolio and our own fire test facility that allows us to perform fundamental pre-approval tests form the basis on which we can offer cost-effective solutions to your specific fire protection requirements.



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