

IPAS 47

IP9189A / B: 2 Component Thin Film Intumescent Paint:

1. Scope

1.1. This document covers the application and curing of the IP9189A / B 2 component Intumescent Paint. This material is primarily designed for use over a suitable 2 component seal coat or primer (dependent upon substrate), and over-coated with a 2 component finish, epoxy or polyurethane (depending upon component final use) in an aerospace coating system. Other applications may be applicable subject to end user approval.

1.2. Please read this document in conjunction with any end user drawings or application information sheets.

2. Substrate Preparation

2.1. All substrates must be clean, grease and dust free prior to painting

2.2. IP9189 A / B is applied as part of a system that includes a primer / sealcoat, depending upon substrate

2.3. On aluminium, magnesium or steels, the base material will be primed with a 2 component epoxy primer, chromated or chrome free. Please request the relevant IPAS application procedure document from our technical services team.

2.4. On composites, the substrate will be sealed with our IP2439 A / B 2 component sealer for composites. Please request IPAS-433-S application instruction sheet.

3. Coating Preparation

3.1. Ensure that the material is thoroughly mixed prior to use. The coating could settle on standing due to the technical composition of the material. Thorough mixing that is designed to lift any settled material from the base of the container is essential prior to coating application.

3.2. **Mixing:** IP9189 A / B is a 2 component material

3.2.1. Mix the 2 components to the following ratio by volume:

- 8 parts IP9189A - base component
- 1 part IP9189B – catalyst component

3.2.2. An induction time of 15 minutes is required following addition of the catalyst. Re-stir the mix before use.

3.2.3. Mixed Pot Life: 4 hours

- 3.3. The mixed material will be ready for use for spray application. An additional 5-20% thinner 665-550-025 may be added to ease atomisation. On very complex shapes and in extremes of temperature or humidity, this thinner addition can be increased to 30%.

Viscosity measurement prior to application may be performed at the discretion of the end user.

4. Application and Curing / Baking

- 4.1. The coating is designed for spray application using conventional or HVLP air atomising spray guns. It is recommended that latest generation 'compliant' spray guns are used to provide the best application with minimal orange peel. Typically a 1.6mm material nozzle is used in conjunction with a compliant air cap / gun combination. Other methods may be employed subject to end user evaluation and approval for specific components.
- 4.2. Parts shall be sprayed with 2 wet on wet cross coats. Allow to flash off (nominal 30 minutes at room temperature 16-25°C) and re-apply 2 wet on wet cross coats.
- 4.3. Either allow these applied coats to air dry / cold cure for 16-24 hours, or allow to flash off for 30-60 minutes, then force cure for 50-70 minutes @ 75-85°C (175°F)
- 4.4. Check film thickness and repeat stages 4.1-4.3 until required film thickness is achieved
- 4.5. Recommended temperature / humidity conditions: Temp 16°C - 25°C; RH 35-70%

5. Coating Thickness

- 5.1. The recommended dry coating thickness will depend on specification and required fire resistance of coated component
- 5.2. Typically the following dry film thickness are recommended:
- | | |
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| 5.2.1. Fire Resistant (resistant to 5 minute burn test): | 300-350microns |
| 5.2.2. Fire Proof (resistant to 15 minute burn test): | 550-650microns |

6. Overcoating

- 6.1. Depending upon specification, or end use, the correctly applied IP9189A / B will be overcoated with either a 2 component epoxy finish (IP9064 range of IP3 range), or a 2 component polyurethane finish (IP6 range). The topcoat can be specified as a non-burn, non-smoke variant. Please check with Indestructible technical service team for more information and application instructions

7. Coverage

We sell our Intumescent IP9189 as a kit of IP9189-A base, 4lt, IP9189-B cat, 0.5 lt. This 4.5 lt kit will cover 6.5 square meters @ 300 microns assuming a transfer efficiency rate of 100%. For spray applications the transfer rate is normally 40-60% efficient.

Application Information



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