

Resinates

GG 991BD-H H



Liquid Bright Gold Resinate Solution / DPIS*

* Development Product Information Sheet

Description

GG 991BD-H H is a sprayable gold solution for use on different metal alloys. After firing metallic gold films are achieved. The films are highly reflective for infra-red radiation and resistant to high temperatures.

Key Benefits

- The material can be used for:
 - Reducing rate of heat transfer on engine shrouds, drag-shute containers, tailcone assemblies, blast shields and cooling ducts;
 - Heat reflectors in aircrafts and military applications to protect heat sensitive parts from infra-red heat radiation generated by engines.
- Free of lead, cadmium and nickel
- Free of phthalate
- REACH ² and RoHS ³ compliant

Processing

1. When stored in a refrigerator allow product to come to room temperature prior to opening, to avoid condensation.
2. Application by: Air Brush Spray
 Electrostatic Spray
3. Firing (peak) recommendations for:

| | |
|----------------------------|--------------|
| 625 Inconel ⁴ : | 450 – 500 °C |
| Titanium alloy: | 450 – 500 °C |
| Stainless steel: | 450 – 500 °C |

Thinner Ethyl acetate

Typical Properties (Solution)

| | |
|------------------------------|---|
| Form: | Orange to red brown liquid |
| Viscosity: | 0.5 – 50 mPas (20 °C, D = 50 rpm) |
| Metal Content ⁵ : | 5.5 % ± 0.2 % Au |
| Chemical Characterisation: | Gold sulforesinate, metal resinates, synthetic and natural resins dissolved in organic solvents |
| Shelf Life: | 12 months from date of shipment with correct storage (in a dry, cool (5 – 25 °C) and dark place with container tightly shut) |

Typical Properties (Fired) ¹

Color: Golden

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- 1 Typical properties based on laboratory test methods. For optimum results all materials should be fired in a profiled furnace supplied with dried, hydrocarbon and other contaminant free air (PP-1).
- 2 REACH compliant according to the latest ** Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.
- 3 RoHS compliant according to the latest ** Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)
- 4 Inconel is a registered trademark of Special Metals Corporation that refers to a family of austenitic nickel-chromium-based super high-performance alloys. Different inconels have widely varying compositions, but all are predominantly nickel, with chromium as the second element.
- 5 Inductively coupled plasma optical emission spectrometry (ICP-OES), also referred to as inductively coupled plasma atomic emission spectroscopy (ICP-AES), is an analytical technique used for the detection of trace metals.

** See the data sheet issue date (DD/MM/YY) as reference of validity of latest edition which is available on request.

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