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riag Seal 971

Black topcoat

riag Seal 971 is a thin, water-based black topcoat.

Properties

- Thin layers
- Applicable in barrel or rack

Make up

	Barrel	Rack
riag Seal 971 Additive (density = 1.0 g/mL)	150 – 500 mL/L	50 – 200 mL/L
DI water	500 – 850 mL/L	800 – 950 mL/L
Dipping time	10 – 20 sec	10 – 20 sec

The rack application is used with a drip time of 20 – 30 seconds or by blowing off procedure before drying. At the barrel application a spin-dry process is used before hardening the layer.

Procedure for a make up

If necessary, put water in the process tank, add **riag Seal 971 Additive** and mix well. Now the bath is ready for operation.

Effluent control and safety considerations

Protective gear such as face shields and gloves should be worn during bath make up and operation. Chemicals shall not be stored below 10 °C. Spent solution has to be treated and discharged according to local wastewater laws.

Operating conditions

Temperature:	18 – 30 °C (room temperature)
Time:	10 – 20 sec.
pH-Value:	≥ 8 – ≤10 , Frequent control is usually not necessary, if no acidic solutions are dragged in. For adjustment use only ammonia.
Drying:	40 – 100 °C

Process sequence

1. Zinc or zinc-nickel plating
2. Water rinse (double)
3. Activation for zinc only in nitric acid (0.3 – 1.0 %)
4. Water rinse
5. **riag Pass**
6. DI water rinse (double)
7. Dry or blow liquid off
8. **riag Seal 971**
9. Drying at 40 – 100 °C

Analysis

riag Seal 971 can be analyzed easily gravimetrically. A scaled sample is dried at 105 °C to a constant weight (approximately 30 minutes) and scaled again. The result should be the same as after a new make up.

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riag Oberflächentechnik AG
Murgstrasse 19a
CH-9545 Wängi
T +41 (0)52 369 70 70
F +41 (0)52 369 70 79
riag.ch
info@riag.ch