

riag Oberflächentechnik AG · Postfach 169 · CH-9545 Wängi TG

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# riag Seal 980

#### Silicium based sealer

riag Seal 980 is a thin, water-based sealing agent on the basis of silicium.

## **Properties**

- Thin layers (about 1 μm)
- High corrosion resistance
- Scratch resistant
- Applicable in barrel or rack
- Colourable (yellow, red, blue)

#### Make up

riag Seal 980 Additive (density = 1.10 g/mL)
Butyl glycol (density = 0.90 g/mL)
Dipping time

Barrel			
500 –	1000 m	L/L	
0 —	200 m	L/L	
10 –	20	s	

Rack		
200 – 350	mL/L	
100 – 400	mL/L	
10 - 20	s	

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 butyl glycol in the process tank, add **riag Seal 980 Additive** and if necessary the required quantity water 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.

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## **Operating conditions**

Temperature:  $18 - 30 \, ^{\circ}\text{C} \text{ (room temperature)}$ 

Time: 10 - 20 sec.

pH-Value: 4 – 6 Frequent control is normally not necessary

Drying: 120 − 160 °C during 20 minutes

## **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 980
- 9. Drying at 120 − 160 °C during 20 minutes

#### **Analysis**

**riag Seal 980 Additive** can be analyzed easily gravimetrically. A scaled sample is dried at 180  $^{\circ}$ C to a constant weight (approximately 15 minutes) and scaled again. The undiluted product should have a residue of 17 – 19  $^{\circ}$ C.

Consumption: approx. 1 kg riag Seal 980 Additive for each 50 m<sup>2</sup>.

#### Liability

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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

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