

## RIAG Pass Colour

### Trivalent chromate passivation layer colouring

Some passivation processes don't produce the desired colour on the plated surfaces. Therefore it could be useful to add a dye to a passivation process to get the desired colour. **RIAG Pass 045** is a passivation process which may be coloured with **RIAG Pass Colours**. The passivated layer can be dyed in different colours if necessary.

The **RIAG Pass Colours** are supplied as easy to use liquid concentrates.

#### Bath make up

**RIAG Pass 045** (density = 1.14 g/mL)

**RIAG Pass Additive**

#### Barrel

12 – 15 Vol %

3 – 25 mL/L

#### Rack

14 – 16 Vol %

3 – 25 mL/L

#### Procedure for a make up of 100 litres

Fill the process tank with 50 L DI water. Add the **RIAG Pass 045** and adjust the volume to 100 litres. Mix well. Adjust the pH with diluted nitric acid (or increase with a 10 % solution of sodium bicarbonate) and heat the temperature of the operating bath to specified values. Now add the **RIAG Pass Additive** of the desired colour and mix well. Now the bath is ready for operation.

#### 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.

## Operating conditions

The operating conditions are those of the passivation process.

Additive	Colour	Quantity	Example
<b>RIAG Pass Additive B</b>	blue	3 mL/L	
<b>RIAG Pass Additive Y</b>	yellow	7 – 10 mL/L	
<b>RIAG Pass Additive G</b>	green	3 mL/L	
<b>RIAG Pass Additive R</b>	red	20 – 25 mL/L	
<b>RIAG Pass Additive O</b>	orange-yellow	7 – 10 mL/L	

These quantities are just an indication for further tests to evaluate if the colour is as needed. The **RIAG Pass Additives** may be mixed.

## Effluent control

The **RIAG Pass 045** chromate conversion coating solution is acidic and contains trivalent chromium salts. Spent solution has to be treated and discharged according to local waste water laws.

## Liability

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