



Yellow chromate conversion coating

# **INSTRUCTION MANUAL**

## **Application fields**

The yellow chromate conversion is used to protect existing or electroplated zinc layers from white rust. It therefore serves as a protections against the oxidation of zinc, but it cannot or only barely remove already existing oxidation. This gives the galvanized objects a noble and aesthetic finish. The yellow shade resembles the formerly common chromate conversion coating with chromium(VI).

# Specifications of the yellow chromate conversion coating

pH-value: 1 to 2

**Working temperature:** room temperature (20 to 30°C)

**Immersion time:** 30 s to 5 min.



# Using the yellow chromate conversion

The pre-treatment is essential, so please degrease thoroughly. Lay your objects into the Tifoo Galvanic Degreaser for some minutes. Rub stronger impurities off with a piece of cloth ore use an ultrasound bath. Please rinse the degreased objects with water before the chromate conversion bath.

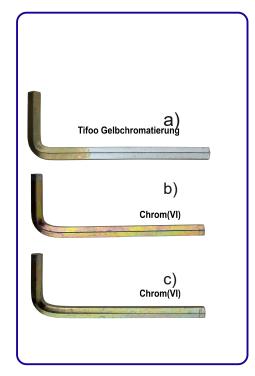
Pour the yellow chromate conversion coating into a suitable recipient and dip the galvanized object into it for a time period of 30 seconds to 5 minutes.

The mentioned time periods are not obligatory, as they depend on the state of the zinc layer, the temperature, and so on - so please make sure regularly that the result lives up to your expectations. It is always possible to interrupt the chromate conversion process and to dip the object in again.

# Comparison to industrially yellow passivated objects

Yellow chromate conversion coating of a galvanized object

We galvanized a steel component with our Tifoo Zinc plating solution + brighteners. Thanks to the included brightening agents, the zinc will turn slightly yellow. In the following gallery, you can see how different exposition periods have different effects on the surface of the galvanized object.

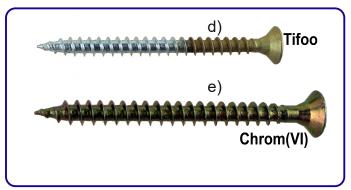


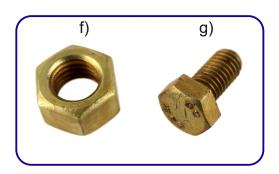
#### Yellow chromate conversion coating

a) shows an Allen key that has been partially dipped into the yellow chromate conversion coating. Below, you can see b) and c) - industrially passivated Allen keys.

On the bottom left (e)), you can see an industrially galvanized screw that afterwards has been passivated with chromic acid. d) shows a blue chromated screw that has been partially dipped into our Tifoo Yellow Chromate Conversion Coating: It is less shiny as industrial passivations.

f) and g) show metal threads or iron bolts dipped into our Tifoo Yellow Chromate Conversion Coating.





## **Security indications**

Attention: Contains hydrochloric acid 3%. Causes skin irritations. Causes severe eye irritations. May cause respiratory irritation. Keep out of the reach of children. Avoid contact with eyes, skin or clothes. Store locked up.

## **Waste disposal**

Please consult your local recycling- or waste disposal centres.

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