

RIAG Clean 602

Immersion degreasing process for steel

RIAG Clean 602 is a soak cleaning process, which is intended to use for iron and steel.

Properties

- Suitable for iron and steel
- High alkaline powder
- Emulsifying (in combination with **RIAG Clean 660 Emulsifier**)
- Not usable for brass or copper alloys

Ingredients

- Sodium hydroxide
- Phosphates
- Carbonates

Make up of 100 Litres

RIAG Clean 602 Salt

RIAG Clean 660 Emulsifier

Temperature

soak

2 – 7 kg

0.4 – 1.4 L

60 °C to 90 °C

Density (20 °C)

RIAG Clean 602 20 g/L

RIAG Clean 602 70 g/L

Standard value

1.018 g/mL

1.066 g/mL

Make up

The tank is filled to $\frac{2}{3}$ with water and heated to approx. 40 °C. Add the calculated amount of **RIAG Clean 602 Salt** and stir until the salt is dissolved. Adjust the required amount of **RIAG Clean 660 Emulsifier** and finally add water up to the working level. Once the cleaner has reached its working temperature, it is ready for use.

Operating parameters

Agitation	Recommended (shorter treating time), as it supports the cleaning process
Tanks	Plastic or lined steel, when using ultrasonic high alloy steel
Heating	Immersion heaters, but thermostatic control is essential.
Fume extraction	Recommended
Water	Tap water may be taken for the makeup, however the use of low calcium or DI water is recommended.

Maintenance

RIAG Clean 602 is used with different concentrations, due to the various possibilities of application. The concentration has to be checked after each make up by analysis or density to stay in the desired working range.

The replenishment of **RIAG Clean 602 Salt** and **RIAG Clean 660 Emulsifier** should be carried out in the same ratio as the make up. This ratio is usually 5 : 1.

Environmental considerations

All concentrates, rinse waters and waste solution must be treated and discharged in accordance with local effluent control regulations. Further information can be gleaned from the MSDS. Chemicals may not be stored below 10 °C:

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Analysis (Analytical methods)

Sample preparation:

Take sample from a well-mixed location and allow to cool down to 25 °C.

Reagents: Hydrochloric acid 1 mol/L
 Methyl orange solution 0.1 % in water

Procedure: 25 mL **RIAG Clean 602** is transferred via pipette into a
 250 mL beaker, add
 100 mL deion. water, add
 5 drops methyl orange solution

 Titrate with hydrochloric acid 1 mol/L from yellow to red

Calculation: **RIAG Clean 602 Salt** (g/L) = use of HCl in mL x 2.12

Adding 1.0 g/L **RIAG Clean 602 Salt** will increase the density 0.001 g/cm³.

If the degreasing process doesn't work properly, even though the concentration is within the desired range, a new makeup is necessary.

Attention:

Chemicals not intended to be added to the process may disturb and influence the quality of the processed surfaces.