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# riag Clean 601

## All-purpose degreasing process

**riag Clean 601** is an alkaline degreasing process for iron and nonferrous metals.

### Properties

- Suitable for iron, steel, brass, copper, magnesium or aluminium
- Alkaline powder
- Emulsifying or demulsifying (in combination with **riag Clean\***)

### Ingredients

- Silicates
- Carbonates
- Phosphates

### Make up of riag Clean 601

	ultrasonic		soak		spray	
<b>riag Clean 601 Salt</b>	10 –	30 g/L	20 –	50 g/L	30 –	50 g/L
<b>riag Clean*</b>	2 –	6 mL/L	4 –	10 mL/L	0 –	2 mL/L
Temperature	40 –	70 °C	60 –	80 °C	70 –	90 °C
Time	1 –	5 min	1 –	10 min		

**riag Clean\*:** for the best solution, contact our sales department

## 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 601 Salt** and stir until the salt is dissolved. Then **riag Clean\*** is added and filled up to the working level with DI water. After reaching the working temperature, the cleaner 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 601** can be used with different concentrations depending on the application. The concentration has to be checked after each make up by analysis to stay in the desired working range. The addition of **riag Clean 601** and **riag Clean\*** should always be done in the same ratio as the make up. Normally the ratio is 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:

## Liability

This instruction manual was compiled with reference to the state of the art and all current standards, and is based on the long-term knowledge and experience of riag. However, riag cannot monitor compliance with this instruction manual and the methods described herein at the customer/end-user's premises. Work carried out with riag products must be adapted accordingly to meet local conditions. In particular, riag cannot accept liability for damage, loss or cost incurred due to a failure to adhere to this instruction manual, improper application of the methods, unauthorised technical modifications, insufficient maintenance or the absence of maintenance in respect of the requisite technical hardware or equipment, or in the event of use by unqualified personnel. riag is not liable for damage or loss caused by riag or its employees except where intention or gross negligence can be proved. riag furthermore reserves the right to make changes in relation to products, methods and the instruction manual without prior notice.

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## Analysis (Analytical methods)

### Sample preparation:

The sample must be taken from a well-mixed location and allowed to cool down to 25 °C.

### Reagents:

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

### Procedure:

50 mL        **riag Clean 601** are 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 601 Salt** (g/L) = use of HCl in mL x 2.00

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.