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riag Clean 609

High alkaline degreasing process

riag Clean 609 is a soak cleaning process, which is intended to use for iron and steel. Nonferrous metals alloys should be tested in practice.

Properties

- Powder (salt) or liquid concentrate (solution contains 150 g/L **riag Clean 609 Salt**)
- Suitable for iron, steel and copper (limited use for copper alloys)
- Highly alkaline
- Emulsifying / demulsifying (in combination with **riag Clean***)

Ingredients

- Sodium hydroxide
- Organic acid salts

Make up of riag Clean 609

| | soak | electrolytical |
|--------------------------|----------------|-------------------------|
| °riag Clean 609 Salt | 20 – 50 g/L | 80 – 120 g/L |
| °riag Clean 609 Solution | 130 – 330 mL/L | 530 – 800 mL/L |
| riag Clean* | 1 – 10 mL/L | 0 – 3 mL/L |
| Temperature | 40 – 70 °C | 20 – 50 °C |
| Time | 1 – 20 min | 1 – 5 min |
| Current density | | 1 – 5 A/dm ² |

° The electrolyte can be prepared with **riag Clean 609 Salt** or **riag Clean 609 Solution**.

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 609 Salt** and stir until the salt is dissolved. Add the required amount of **riag Clean*** 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 609 is used with different concentrations, due to the various possibilities of application. The concentration has to be checked after each make up by analysis to stay in the desired working range. The replenishment of the ingredients should be carried out in the same ratio as the make up. Normally the ratio of **riag Clean 609 Salt** (or **riag Clean 609 Solution**) to **riag Clean*** is fixed.

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

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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 0.1 mol/L
Methyl orange solution 0.1 % in water

Procedure:

1 mL **riag Clean 609** is transferred via pipette into a
250 mL beaker, add
100 mL deion. water, add
5 drops methyl orange solution

Titrate with hydrochloric acid 0.1 mol/L from yellow to red

Calculation:

riag Clean 609 Salt (g/L) = consumption in mL x 5.2
riag Clean 609 Solution (mL/L) = consumption in mL x 34.7

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.