riag Oberflächentechnik AG · Postfach 169 · CH-9545 Wängi TG

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riag Clean 686

Degreasing process with very high cleaning efficiency

The **riag Clean 686** is a degreasing process with an excellent cleaning performance, which is intended to be used for iron and steel. The main applications are industrial parts cleaning, cleaning before and after heat treatment, especially before gas- and plasma nitriding. There are no negative influences of remaining cleaner on the part.

Properties

- Liquid
- Suitable for steel and magnesium (depending on the alloy)
- Spraying possible above 60 °C
- Demulsifying
- Temporary corrosion protection
- Usable with tap water

Ingredients

- Amines
- Organic acid sodium salt
- Nonionic surfactants
- Anionic surfactants

Make up of 100 Litres

	Range		Optimum	
riag Clean 686 Additive	1 – 4	L	2.5	L
Temperature	40 – 80	°C	70	°C
Time	5 – 30	min.		

Make up

The tank is filled to $^{2}/_{3}$ with water. Add the calculated amount of **riag Clean 686 Additive** and stir well. 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 make up, however the use of low calcium or DI water is recommended.

Maintenance

riag Clean 686 is used in 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.

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:
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:	50 mL	**riag Clean 686** are transferred via pipette into a
	250 mL	beaker, add
	50 mL	deion. water, add
	5 drops	methyl orange solution
		Titrate with hydrochloric acid 1 mol/L from yellow to red
Calculation:	**riag Clean 686 Additive** (g/L) = use of HCl in mL x 8.33	

Attention:

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