



NOVAPHOS F 330L

LOW TEMPERATURE LIQUID DETERGENT PHOSPHATER

1. DESCRIPTION

Novaphos F 330L is a combined spray or immersion detergent and iron phosphating product for use on mild steel, unpassivated zinc coated steel and aluminium prior to painting.

Novaphos F 330L rapidly removes oils, then deposits a uniform phosphate coating. Coating weights in excess of 400 mg per sq. metre can be achieved on mild steel in 60 seconds at 45°C – 50°C. Coatings produced by **Novaphos F 330L** have a distinctive blue colour. An added feature is a corrosion inhibitor which reduces the problem of interstage flash rusting.

When difficult soils are encountered, cleaning performance may be improved, if necessary, by addition of a suitable low temperature phosphating detergent such as, **Synergic CA**. When used by immersion, it will be necessary to provide some form of agitation, or preferably, to pre-clean in a suitable alkaline cleaner.

2. OPERATING CONDITIONS

Operate **Novaphos F 330L** at between 40°C and 60°C. Do not operate at higher temperatures. Foaming may be encountered at temperatures below 40 degrees.

Concentration	1 – 4% v/v
Process Time	30 – 120 seconds

3. PROCESS SEQUENCE

Novaphos F 330L may be used in 2, 3, or 4 stage spray phosphating machines. A typical sequence is as follows.

- a) **Novaphos F 330L** at 1 – 3% v/v, 40°C – 60°C, 45 – 90 seconds.
- b) As for stage 1.
- c) Overflowing rinse.
- d) De-ionised rinse or Sealing rinse. (Chromated or non-chromated Seal).

PROCESS SEQUENCE (continued)

A typical immersion process is.

- a) Alkali clean.
- b) Overflowing rinse.
- c) Novaphos F 330L as above.
- d) Overflowing rinse.
- e) De-ionised rinse or Sealing rinse.

4. NEW BATH MAKE UP

A new bath of **Novaphos F330L** requires pH adjustment to the appropriate level with the use of **Parco Primer 40**, Ammonia 5% solution or Soda Ash.

Fill process tank with water and heat to 40°C – 60°C then;

- 1. Add with stirring 1 – 4% v/v **Novaphos F330L**.
- 2. Determine the bath pH and adjust with approximately 4.5 kg of **Parco Primer 40** per 1000 litres of solution.

5. BATH CONTROL

The bath is controlled by means of a simple acid titration as follows:

- a) Take a 10 ml sample from the bath.
- b) Add a few drops of phenolphthalein indicator.
- c) Titrate with 0.1N Sodium Hydroxide solution until the solution turns pink.

The number of mls x 0.5 = % **Novaphos F 330L** by volume.

Maintain the pH of the bath as follows.

Mild steel: 4.2 – 5.5.
Galvanised and aluminium: 3.8 – 4.2.

6. SAFETY AND HANDLING

Novaphos F 330L is not classed as hazardous. However, handle the concentrate with care. Wear gloves when handling. Wash out containers after emptying.

For full details refer to the product Safety Data Sheets.

7. PACKAGING

Novaphos F 330L is supplied in non-returnable 20 and 200 litre drums.

DISCLAIMER

Any information given is, to the best of our knowledge, the best currently available, with respect to our products and their use, but it is subject to revision as additional knowledge and experience is gained. Such information is offered as a guideline for experimentation only and is not to be construed as a representation that the material is suitable for any particular purpose or use. Customers are encouraged to make their own enquiries as to the material's characteristics and, where appropriate, to conduct their own tests in the specific context of the material's intended use. This information is not a license to operate under nor is it intended to suggest infringement of any patent. We guarantee a uniform quality standard for this product. The only conditions and warranties accepted by Henkel in relation to this product or process are those implied by either Commonwealth or State statutes.