

# RedOne™ Pickling Spray 240

## A unique, safer-to-use pickling spray.

Many of the processes used for pickling stainless steel lead to the development of hazardous nitric fumes. We have developed a ONE Technology, to avoid this with a unique low fuming pickling spray which reduces the toxic nitric fumes by 60%.

### Standard applications

The pickling spray restores stainless steel surfaces that have been damaged during fabrication operations such as welding, forming, cutting and blasting. It removes weld oxides, the underlying chromium-depleted layer and other defects that may cause local corrosion.

Avesta RedOne™ Pickling Spray 240 is universal and suitable for spray pickling larger surfaces of all stainless steel grades. High alloyed steels and duplex steels may need more than one treatment. The Avesta Duplex Spray 250 is also a stronger alternative for duplex steels.

### Features

- » ONE Technology, 60% NO<sub>x</sub>-reduction, this prevents the workers from breathing dangerous acid fumes. See enclosed photos of the yellow NO<sub>x</sub> fumes during pickling staining caused by sea water, "tea-staining", rain water, "water scale" and road salt. For more severe surface rust, pickling may be required.
- » Perfect Adhesion & high efficiency thanks to the thixotropic properties of the spray. At the application after shaking it is very fluid (easy to spray), after being on the surface the product gets a very good adhesion again.

### Benefits

- » No reduced overhead dropping
- » A very thin layer of the is enough (high efficiency)
- » Easy to use, doesn't dry out. Has long term efficiency hence can be used on different steel grades in adjusting the pickling time. Easy to wash off



1200 kg IBCs



220 kg drums

30 kg drums

20 kg drums



Photos: Available in several packages  
(Sizes may differ from markets)

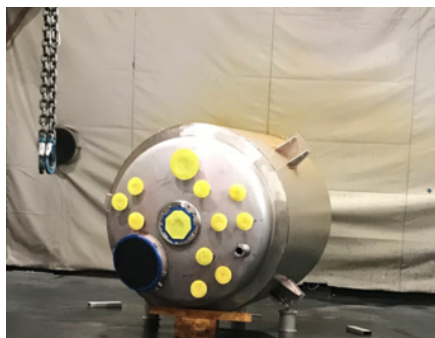


Photo: Spray pickling with Avesta RedOne™ 240



Photo: Spray pickling competitor

## Instructions for use



1. Apply all chemicals by using an acid resistant pump like Avesta SP 25. Start with pre-cleaning to remove oil and grease by using Avesta Cleaner 401 and then rinse off with water.

2. Stir the pickling spray before usage. Apply with SP 25 and spray evenly over the entire surface.

3. Typical reaction time for standard steel grade s like 304 & 316 is 40 min at 20oC and 30 min at 30oC. The pickling time may vary for the same steel grade depending on surface.

4. Rinse off the pickling residuals by using a high-pressure water jet. Use deionized water for the final rinsing of sensitive surfaces. The waste water should be neutralized before discharge.

## Packaging

Avesta RedOne™ Pickling Spray 240 is supplied in 20, 30 kg and 220 kg polyethylene containers or 1200 kg IBC polyethylene containers. Availability of different packages sizes may differ between markets.

All packing material follows the UN regulations for hazardous goods.

## Storage

Avesta RedOne™ Pickling Spray 240 should be stored indoors at room temperature. Containers must be kept properly closed, in an upright position and inaccessible to unauthorized persons.

The product is perishable and should not be kept in storage longer than necessary. The spray may decompose during storage and hence need to be stirred before usage. It has a maximum shelf life of two years when stored at room temperature. Exposure to higher temperatures (>35 °C) may damage the product and reduce the shelf life.

## Worker safety

Avesta First Aid Spray 910 (available only on some markets) or Hexafluorine® should be readily available to all who work with pickling to use as a first rinse to decontaminate small acid splashes of pickling spray, followed by Calcium Gluconate Gel or Solution to be used as a first aid to treat the HF acid burn.

Protective clothing. In general, users should wear acidresistant overalls, gloves and rubber boots. Face visor should be used and, if necessary, suitable respiratory protective devices.

Special conditions may apply from one country to another. Consult our website where updated Safety Data Sheets can be found.

## Passivation

To further improve the result we recommend a passivation after pickling using Avesta FinishOne Passivator 630, which is a safer-to-use acid free passivation method

## Waste treatment

The wastewater produced when pickling contains acids and should be treated with Avesta Neutraliser 502 or with slaked lime to a pH-value of 7 – 10 before discharge. Heavy metals from stainless steel are precipitated as a sludge, and should be sent for deposition according to local regulations.

Empty containers (HDPE) must be cleaned and can then be recycled according to local regulations.

## Other information

For more information, please visit our website:

[www.voestalpine.com/welding](http://www.voestalpine.com/welding), where you can find Safety Data Sheets and other useful information.



Information given in this brochure may be subject to alteration without notice. Care has been taken to ensure that the contents of this publication are accurate, but voestalpine Böhler Welding Nordic AB and its subsidiary companies do not accept responsibility for errors or for information which is found to be misleading. Suggestions for or descriptions of the end use or application of products or methods of working are for information only and the company and its subsidiaries accept no liability in respect thereof. Before using products supplied or manufactured by the company the customer should satisfy himself of their suitability.