

Lasting Connections

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. To improve safety when pickling, we have developed a unique lowfuming pickling spray which reduces the toxic nitric fumes by $50\,\%$.

Standard applications

Avesta $RedOne^{TM}$ 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.

Features

- 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.
- Improved pickling result, offers a brighter surface with less discolouration than classic products.
- Higher yield, decreased consumption, thanks to the visible red colour and its free-flowing consistency which facilitates application.

NOx (ppm) 5000 4000 3000 2000 RedOne™ Spray 1000 0 2 4 6 8 10 12 14 Time (min)

50% fume reduction compared to standard Pickling Spray.



Before and after pickling.

Passivation

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



Avesta RedOne™ Pickling Spray 240 offers safer spray pickling.

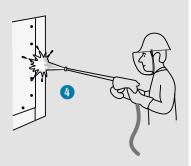
Instructions for use



- 1. Pre-clean, remove oil and grease using Avesta Cleaner 401, and then rinse off with water. Apply the Cleaner with an acid-resistant pump, e.g. Avesta Membrane Pump SP-25.
- 2. Stir the solution before use. Apply the Pickling Spray with an acid-resis-



- tant pump, e.g. Avesta Membrane Pump SP-25. Spray evenly over the whole surface.
- 3. Typical pickling time for steel grade 304 and 316 is 40 min at 20 °C and 30 min at 30 °C. The pickling time may vary for the same steel grade, de-



- pending on the surface finish and the welding method.
- 4. Remove pickling residues using a high-pressure water jet and then rinse with water. The waste water should be treated before discharge.

Packaging

Avesta RedOne™ Pickling Spray 240 is supplied in 30 kg and 220 kg polyethylene containers or 1200 kg IBC polyethylene containers.

All packing material follows the UN regulations for hazardous goods.

Storage

Avesta RedOneTM 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 $^{\circ}$ 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.

Waste treatment

The waste water 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.avestafinishing.com, where you can find Safety Data Sheets and other useful information.







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voestalpine Böhler Welding Nordic AB

Lodgatan 14, SE-211 24 Malmö, Sweden

Tel: +46 (0)40 28 83 00

www.voestalpine.com/welding

