

# RedOne™ Pickling Paste 140

# A powerful, safer-to-use pickling paste.

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 paste which reduces the toxic nitric fumes by 50%.

# Standard applications

The pickling paste 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<sup>TM</sup> Pickling Paste 140 is a stronger version for more difficult brush pickling of welds and smaller surfaces, such as high alloyed steel grades and at lower temperatures, For more standard applications we suggest the more low fuming Avesta BlueOne<sup>TM</sup> Pickling Paste 130.

#### **Features**

- » ONE Technology, 50% NOx-reduction, this prevents the workers from breathing dangerous acid fumes.
- » Higher yield, 60% less consumption, thanks to the visible red colour and its free-flowing consistency which facilitates application.
- » Improved pickling result, offers a brighter surface with less dis coloration than classic products, see photos.



2,4kg drums



13 kg drums

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

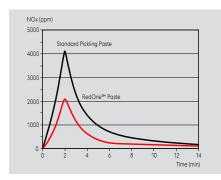


Figure: 50% fume reduction compared to standard Pickling Paste



Photos showing the application of RedOne<sup>TM</sup> Pickling Paste and pickling at low temperature (+8  $^{\circ}$ C) of high alloyed heat exchanger 2205 (1.4462)

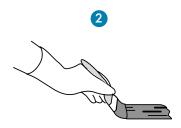


#### Instructions for use



1. Pre-clean,remove oil and grease using Avesta Cleaner 401, and then rinse off with water.

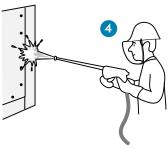
2-Stir or shake the paste before usage.



2. Apply the paste with an acid resistant brush.



3. Typical reaction time for standard alloyed steel grades like 2205 (1.4462 is 90-120 min. at  $10\,^{\circ}\text{C}$  60-90 min. at  $20\,^{\circ}\text{C}$  the pickling time may vary for the same steel grade depending on surface finish.



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 Paste 140 is supplied in 2,4kg and 13kg polyethylene bottles. Availability of different packages sizes may differ between markets.

All packing material follows the UN regulations for hazardous goods.

# Storage

Avesta RedOne™ Pickling Paste 140 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 gel 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 paste, 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 acid resistant 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.

### **Pre-cleaning**

To further improve the result we recommend to remove present oil and grease before pickling using Avesta Cleaner 401.

#### **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:

<u>www.voestalpine.com/welding</u>, 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.

