



# Pickling Spray 204

# A pickling spray for tougher applications.

Avesta Pickling Spray 204, is intended for tougher applications and offers an aggressive spray pickling result for larger stainless steel surfaces.

# 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 Pickling Spray 204 is formulated for more difficult pickling applications such as heavy hot rolled plates, high-alloyed steels such as 904. For normal applications, we suggest the use of our low fuming Avesta RedOne Pickling Spray 240 in order to improve safety. For very difficult applications such as Duplex grades we recommend the usage of our Avesta Duplex Pickling Spray 250.



- » The transparent spray gel has a thixotropic consistency, which makes it stick well to the surface and hence facilitates the application even in difficult positions.
- » The process is sensitive to strong sunlight/high temperatures and the spray may dry into the surface and be difficult to remove. For more sensitive application the Avesta RedOne Spray 240 is recommended since it will not dry easily.



Photo: During



After

Before



1200 kg IBCs



220 kg drums



20 kg drums



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

#### Instructions for use



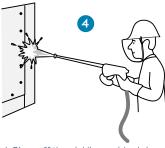
1. Apply all chemicals by using an acid resistant pump like Avesta SP 25. Start with pre-cleaning to remove oil and grease by using Avesta Cleaner 401 and then rinse off with water.



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



3. Typical reaction time for higher alloyed steel grades like 904L (1.4539) is 200 min at 20 °C and 120 min. at 35 °C. The pickling time may vary for the same steel grade depending on surface finish and welding method.



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 Pickling Spray 204 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 Pickling Spray 204 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:

<u>www.voestalpine.com/welding</u>, where you can find Safety Data Sheets and other useful information.







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