

STAINLESS STEEL PICKLING

PICKLING LIQUID - APPLICATIONS & DIRECTIONS FOR USE

PICKLING LIQUID is only suitable for use on austenitic stainless steel. The product is mainly used for pickling stainless steel installations and tanks.

The product may be used by circulation, spraying and in immersion baths. The surfaces to be cleaned must be free of oil, grease and ink marks.

CIRCULATION METHOD

This method is mainly used for treatment of pipelines. The pipeline is filled with undiluted *PICKLING LIQUID* and circulated through pump and tank loop arrangement. Treatment time is between 2 to 6 hours depending on the degree of contamination. Do not pickle longer than required. Drain the lines and flush through thoroughly with demineralised water. If passivation is required, it should be carried out immediately after with *PASSIVATING LIQUID*. The treatment time is about 2 hours. Drain the lines and flush through with demineralised water. After drying the lines, test the passivity of the steel with a Palladium test set.

SPRAYING METHOD

This method is mainly used for treatment of large surfaces such as cargo and storage tanks. The product is sprayed undiluted using suitable tank washing machine. The treatment procedure is the same as the circulation method.

IMMERSION METHOD

This method is used mainly for treatment of internal and external surfaces at the same time. The articles to be treated are immersed into a plastic or plastic lined bath. The treatment procedure is the same as the circulation method.

TREATMENT OF EFFLUENT

Before disposing the treatment products it is necessary to neutralize the acid and make the fluorides and heavy metals insoluble with slaked lime to give a pH of 8.5 to 9.

PICKLING PASTE - APPLICATIONS & DIRECTIONS FOR USE

Before commencing work with *PICKLING PASTE*, safety precautions must be observed and protective equipment made use of. *PICKLING PASTE* is to be stirred with a plastic or wood stirrer before use, or shaken briefly. *PICKLING PASTE* is to be painted generously on the pickling positions. The reaction time should be observed. Neutralization is then to be undertaken with *Passivating Liquid*, after consulting the relative application instructions. Upon completion, the process surface is to be rinsed under cold water, using a high pressure water jet at a pressure of at least 120 bar. The rinsing effect can be improved and enhanced by employing plastic or stainless steel wire brushes.

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PICKLING LIQUID

Specially formulated for austenitic stainless steel treatment

- Removes weld slag, annealing scale, grinding dust and iron particles
- Fast pickling reaction
- Forms uniform protective oxide film
- Suitable for cleaning aluminum

PICKLING PASTE

Translucent Pickling paste for stainless steels

- For the removal of high temperature oxide scale and annealing colors in the area of weld seams and heat-influenced zones

PRODUCT CHARACTERISTICS PICKLING LIQUID

Appearance:	clear liquid
pH 1% solution:	1 - 2
Density:	1,13 (20°C)
Flash point:	none
IMO Class:	8 / II
UN Number:	1796
ADR:	8.3b)

PICKLING PASTE

Appearance:	transparent paste
pH at 20°C:	<2,0
Density:	1,25 g/cm ³ (20°C)
Flash point:	not applicable
IMO Class:	8 / II
UN Number:	2922
ADR:	8.76b)

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REACTION TIME PERIODS

Rusty and acid-resistant steels, stainless steels:	15 - 60 minutes
Nickel and nickel alloys:	5 - 20 minutes
Copper - nickel alloys:	5 - 20 minutes

The reaction time period depends on the quality of the materials that are to be treated, as well as on the ambient air- and materials temperature. The optimal pickling temperature is 18°C - 20°C. Working in direct sunlight should be avoided because of the danger of premature drying.

GENERAL REMARKS

1 kg of PICKLING PASTE is sufficient for approx. 50 - 80 running meters of weld seam + heated area. PICKLING PASTE contains no hydrochloric acid and no chloride.

IMPORTANT INFORMATION FOR SAFETY AND USER PROTECTION!

PICKLING PASTE is an extremely dangerous product - Please request all available information and Material Data Sheets when ordering.

Effect

Acute: extreme caustic effect on the skin and mucous membranes, particularly of the eyes (danger of going blind).

Symptoms

Immediate: a burning and stabbing feeling in the eyes, nose, mouth and throat. Coughing, hoarseness, discharge of nasal secretion, bronchial bleeding

NATURE OF SPECIAL RISKS AND SAFETY ADVICE

In accordance with the latest EEC Council directives these products are subjected to:

PICKLING LIQUID

R23/24/25	: Toxic at inhalation, in contact with skin and if swallowed
R34	: Causes burns
S2	: Keep out of reach of children
S7/9	: Keep container tightly closed and in a well ventilated area
S26	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39	: Wear suitable protective clothing, gloves and eye / face protection
S45	: In case of accident or if you feel unwell, seek medical advice immediately (show the label if possible)

PICKLING PASTE

R23/24/25	: Toxic at inhalation, in contact with skin and if swallowed
R35	: Causes severe burns
S2	: Keep out of reach of children
S7/9	: Keep container tightly closed and in a well ventilated area
S26	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28	: After contact with skin, wash immediately with plenty of water and seek medical advice
S36/37/39	: Wear suitable protective clothing, gloves and eye / face protection
S45	: In case of accident or if you feel unwell, seek medical advice immediately (show the label if possible)