



# CARECLEAN PICKLING LIQUID

**Liquid for pickling austenitic stainless steel cargo tanks, decklines and piping-systems**

- Pickling Liquid for austenitic stainless steel
- Non Flammable

## DESCRIPTION

Careclean Pickling Liquid is based on nitric acid, hydrofluoric acid and non-ionic surface-active substances. The fluid may be used only on austenitic stainless steel as it corrodes other materials. It removes welding slag, annealing scale, grinding dust and iron parts etc. If left untreated the free iron particles will cause corrosion of austenitic stainless steel.

## ADVANTAGE

Careclean Pickling Liquid is blended under controlled and stable circumstances minimizing the dangers of onboard mixing.

## APPLICATIONS

Careclean Pickling Liquid is used mainly for pickling installations, tanks and pipework. It may be used by means of circulation, spraying or in immersion baths.

Before commencing, make sure the surfaces are thoroughly cleaned and degreased, free of any organic material that could react with Careclean Pickling Liquid. Well cleaned and degreased surfaces, will result in a uniform pickling job. Use Careclean ECS Quick Dry to remove felt pen ink-marks. Careclean Alkaline is used for degreasing small metal surfaces. To degrease tanks we advice the use of a 1 - 2 % solution of Careclean GP Enviro or Multiclean in warm water. After pre-cleaning rinse thoroughly with a waterjet to remove any degreaser residues.

### *Recirculation Method*

This method is used mainly for cargo tank pipingsystems. Fill the system with cold undiluted Careclean Pickling Liquid. Pickling will take 2 to 6 hours depending on the degree of discoloration and on the sort of austenitic steel.

discover the difference



### *Recirculation Method (continued)*

Drain the system and rinse carefully, preferably with demineralized water. An introduction of chlorides being present in ordinary water will cause instant corrosion as the protective passive layer of the austenitic stainless steel has been removed after the use of Careclean Pickling Liquid. After rinsing with demineralized water passivation should follow immediately. Passivation is conventionally done by ambient air (24 hours as a minimum), but to speed up this process or if there is insufficient air flow, like in cargo tanks or lines, liquid passivation must follow. Careclean Passivation Liquid has to be used.

### *Spray Method*

Careclean Pickling Liquid is sprayed undiluted on the stainless steel. Leave to react for 30 minutes or as long as necessary for a good result. The liquid should in any case not dry before rinsing. After pickling rinse thoroughly with demineralized water. After rinsing the surfaces must be passivated.

### *Passivation*

A protective chromiumoxide layer will be formed on the austenitic stainless steel only if oxidizing conditions are present. For example during long term rinsing with cold water (below 25 °C) or during storage in the open air. Under these circumstances the stainless steel automatically passivates. The time for passivation has to be 24 hours as minimum. In case there is lack of time we recommend passivation with Careclean Passivation Liquid, particularly if the stainless steel is exposed to corrosive conditions soon after pickling.

Good results are obtained if the object is sprayed/brushed with Careclean Passivation Liquid immediately after it has been well rinsed. Five minutes after applying Passivation Liquid rinse with plenty of DI water.

### **SAFETY NOTE**

Careclean Pickling Liquid contains nitric acid and hydrofluoric acid. It is extremely dangerous and when using Careclean Pickling Liquid all necessary personal protection measurements must be taken.

### **DI WATER UNITS**

Marine Care supplies a complete range of demineralizer bottles. The bottles contain a mix of cationic and anionic (mixed-bed) resin, to remove dissolved metals, hardness, sulfates, chlorides, etc. from the water. These demineralizer bottles are available in 40, 75, 100 and 150 liters.

### **DOSAGE**

Spraying	undiluted
Recirculation	undiluted

CARECLEAN  
PICKLING LIQUID

- Pickling Liquid for austenitic stainless steel
- Non flammable

discover the difference

**MARINE CARE BV**  
Oude Maasweg 35  
Port 4005  
3197KJ Rotterdam Botlek  
The Netherlands  
T. +31 (0)10 2950342  
F. +31 (0)10 2950345  
E. [supply@marinecare.nl](mailto:supply@marinecare.nl)



## PROPERTIES

Article number	14610 / 16610
pH	1
Density	1,10 g/cm <sup>3</sup>
Flashpoint	None
Physical state	Liquid

For detailed information on safety and health, please refer to the Material Safety Data Sheet MSDS and/or product label.

CARECLEAN  
PICKLING LIQUID

- Pickling Liquid for austenitic stainless steel
- Non Flammable

discover the difference

**MARINE CARE BV**  
Oude Maasweg 35  
Port 4005  
3197KJ Rotterdam Botlek  
The Netherlands  
T. +31 (0)10 2950342  
F. +31 (0)10 2950345  
E. [supply@marinecare.nl](mailto:supply@marinecare.nl)