



Treatment of stainless steel surfaces using the immersion process Removal of oxides, especially tarnish or other discolorations as well as rolling/welding scale, corrosion, extraneous rust and ferritic indentations. Supplied as a concentrate (max. dilution 1:1)

#### Individual characteristic

In an optimal temperature range of 20°C to 40°C, this acidic pickling agent is extremely versatile

Simple and effective pickling despite the use of hydrofluoric acid, resulting in improved

Surface quality that is free of ferrite

Significantly reduced NOX emissions

slightly longer reaction time in reactions with higher alloyed material grades

Removal of machining-related oxide layers on stainless steel



#### General instructions for use

- Remove dirt, grease or oil residues before treatment with acidic cleaner (Pelox Surface Cleaner FR-D) or alkaline degreaser (Pelox Cleaning and Degreasing Agent AR 90)
- Optimum surface qualities and pickling times require intelligent bath management. This requires knowledge of the acid content and metal enrichment (iron content) in the pickling bath
- We can prepare these analyses on request in order to optimally adjust the sharpening concentrate to your quality requirements
- Avoid direct sunlight and high ambient temperatures (recommended storage and processing temperature: 5 25 °C)
- Observe safety data sheet and wear personal protective equipment
- Ensure proper wastewater treatment and disposal of residual materials
- All information is non-binding subject to change







State of aggregation: Form:
Color:
Odour:
pH value: Density at 20 °C:

fluid fluid colorless stinging 0,5 1,3 g/cm<sup>3</sup>

## LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Signal word: Hazardous components: GHS05 GHS06 Danger sulfuric acid Nitric acid ... % [C ÿ 70%] Hydrofluoric acid



## DANGER AND SAFETY INFORMATION

#### Hazard warnings:

#### H290; H301+H331; H310; H314

May be corrosive to metals. Toxic if swallowed or inhaled. Fatal in contact with skin.

Causes severe skin burns and eye damage.

#### Safety instructions:

#### P260; P280; P303+P361+P353; P305+P351+P338; P310; P403+P233

Do not breathe mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Store in a well-ventilated place. Keep container tightly closed.

## Additional hazard characteristics: EUH071

Corrosive to the respiratory tract.







Additive for pickling baths made from hydrofluoric/nitric acid mixtures Reduces nitrous emissions Stabilizes heavily used pickling baths

#### Individual characteristic

Particularly suitable for immersion pickling baths in work areas without additional exhaust air technology



#### General instructions for use

- The respective product must be tested for suitability before use (pre-test)
- Addition only after prior pickling bath analysis
- Avoid direct sunlight and high ambient temperatures (recommended storage and processing temperature: 5 25 °C)
- Observe safety data sheet and wear personal protective equipment
- Ensure proper wastewater treatment and disposal of residual materials
- All information is non-binding subject to change







State of aggregation: Form: Color: Odour: pH value: Density at 20 °C: fluid fluid greenish odorless <sup>0</sup> no data available

## LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Signal word: Hazardous components:

GHS05
Danger
no



## DANGER AND SAFETY INFORMATION

#### Hazard warnings:

H290; H314

May be corrosive to metals. Causes severe skin burns and eye damage.

#### Safety instructions:

#### P260; P280; P303+P361+P353; P305+P351+P338; P310

Do not breathe mist/vapours/spray. Protective gloves/protective clothing/eye protection/face protection IF ON SKIN (or hair): Remove/shower immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing. Immediately call a POISON CENTER/doctor.

## **OTHER HAZARDS**

Risk of slipping due to leaking/spilled product.

PBT assessment: According to information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be PBT.

vPvB assessment: According to the information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be vPvB.







Stabilized oxidizing agent based on hydrogen peroxide as a complexing agent additive for dip pickling agent T200 A

#### Individual characteristic

Enables the use of low-odor dip pickling solutions





#### processing

Pelox Top Oxidator is added to the pickling bath using an automatic dosing device or manually

The pickling bath must then be well homogenized



#### fertility

Before adding the oxidizer, an accurate Determination of the redox value by hand-held measuring device or by analysis in order to achieve optimal To determine dosage



#### **Recommended accessories**

Redox-Hand-Tester Electronic measuring probe Dosing pump

#### General instructions for use

- Observe safety data sheet and wear personal protective equipment
- Ensure proper wastewater treatment and disposal of residual materials
- All information is non-binding subject to change





State of aggregation: Form:
Color:
Odour:
pH value: Density at 20 °C:

fluid liquid colorless stinging 2 - 4 1,13 g/cm<sup>3</sup>

## LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Signal word: Hazardous components: GHS05 GHS07 Danger Hydrogen peroxide in solution



## DANGER AND SAFETY INFORMATION

Hazard warnings: H302; H315; H318; H335 Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

#### Safety instructions: P280; P305+P351+P338; P310

Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing. Immediately call a POISON CENTER/doctor.

No additional information is available.







DIP PICKLING

## **Application/product description**

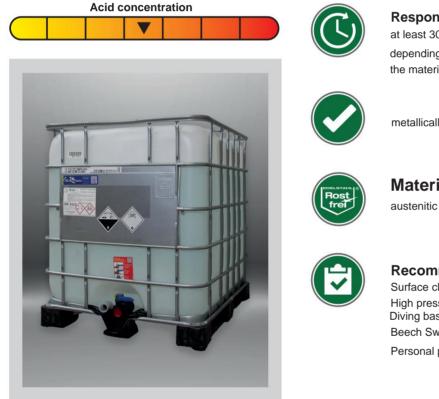
Treatment of stainless steel surfaces Removal of tarnishing colours as well as rolling/welding scale, corrosion, extraneous rust and ferritic indentations

### Individual characteristic

Chloridfrei

Dip pickling can be used in the circulation process

High economic efficiency due to long-lasting, constant strong acid concentration with regular bath care Adaptation to individual needs possible through precise resharpening



#### **Response time**

at least 30 to 360 min. depending on the material and bath temperature, the material and the desired surface quality **result** 

metallically pure surface with matt to satin-gloss appearance

#### Materials to be treated

austenitic stainless steels, duplex, superduplex

#### **Recommended accessories**

Surface cleaner or alkaline degreaser High pressure cleaner Diving baskets Beech Swans Personal protective equipment

#### General instructions for use

- Remove dirt, grease or oil residues before treatment with acidic cleaner (Pelox Surface Cleaner FR-D) or alkaline degreaser (Pelox Cleaning and Degreasing Agent AR 90)
- Optimum surface qualities and pickling times require intelligent bath management. This requires knowledge of the acid content and metal enrichment (iron content) in the pickling bath
- We can prepare these analyses on request in order to optimally adjust the sharpening concentrate to your quality requirements
- Avoid direct sunlight and high ambient temperatures (recommended storage and processing temperature: 5 25 °C)
- Observe safety data sheet and wear personal protective equipment
- Ensure proper wastewater treatment and disposal of residual materials
- All information is non-binding subject to change







State of aggregation: Form: Color: Odour: pH value: Density at 20 °C: fluid fluid colorless stinging <1 1,15 - 1,20 g/cm<sup>3</sup>

## LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Signal word: Hazardous components: GHS05 GHS06 Danger Nitric acid ... % [C ÿ 70%] Hydrofluoric acid



## DANGER AND SAFETY INFORMATION

Hazard warnings:

#### H290; H301+H331; H310; H314

May be corrosive to metals. Toxic if swallowed or inhaled. Fatal in contact with skin.

Causes severe skin burns and eye damage.

#### Safety instructions:

#### P260; P280; P303+P361+P353; P305+P351+P338; P310; P403+P233

Do not breathe mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Store in a well-ventilated place. Keep container tightly closed.

Additional hazard characteristics: EUH071

Corrosive to the respiratory tract.







T-100 CONC 1

## Application/product description

Treatment of stainless steel surfaces Removal of tarnishing colours as well as rolling/welding scale, corrosion, extraneous rust and ferritic indentations Supplied as a concentrate (add water) Also available as a ready mix and resharpener

### Individual characteristic

Chloridfrei

Dip pickling can be used in the circulation process

High economic efficiency due to long-lasting, constant strong acid concentration with regular bath care Adaptation to individual needs possible through precise resharpening



#### General instructions for use

- Remove dirt, grease or oil residues before treatment with acidic cleaner (Pelox Surface Cleaner FR-D) or alkaline degreaser (Pelox Cleaning and Degreasing Agent AR 90)
- Optimum surface qualities and pickling times require intelligent bath management. This requires knowledge of the acid content and metal enrichment (iron content) in the pickling bath
- We can prepare these analyses on request in order to optimally adjust the sharpening concentrate to your quality requirements
- Avoid direct sunlight and high ambient temperatures (recommended storage and processing temperature: 5 25 °C)
- Observe safety data sheet and wear personal protective equipment
- Ensure proper wastewater treatment and disposal of residual materials
- All information is non-binding subject to change







State of aggregation Form:	
Color:	
Odour:	
pH value: Density at 20 °C:	

fluid fluid colorless biting <1 1,15 - 1,20 g/cm<sup>3</sup>

## LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Signal word: Hazardous components: GHS05 GHS06 Danger Nitric acid ... % [C ÿ 70%] Hydrofluoric acid



## DANGER AND SAFETY INFORMATION

#### Hazard warnings:

#### H290; H301+H331; H310; H314

May be corrosive to metals. Toxic if swallowed or inhaled. Fatal in contact with skin.

Causes severe skin burns and eye damage.

#### Safety instructions:

#### P260; P264; P280; P303+P361+P353; P305+P351+P338; P310; P403+P233

Do not breathe mist/vapour/spray. Wash thoroughly with water after use. Protective gloves/

Wear protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Store in a well-ventilated place. Keep container tightly closed.

Additional hazard characteristics: EUH071

Corrosive to the respiratory tract.

## **OTHER HAZARDS**

Risk of slipping due to leaking/spilled product.

PBT assessment: According to information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be PBT.

vPvB assessment: According to the information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be vPvB.







Treatment of stainless steel surfaces using the immersion process Removal of oxides, especially tarnish or other discolorations as well as rolling/welding scale, Corrosion, extraneous rust and ferritic indentations Supplied as a concentrate (add water) Also available as a ready mix and resharpener

#### Individual characteristic

Contains no nitric acid - no nitrous gases in the room or exhaust air Dip pickling can be used in the recycling process

No nitrite and nitrate in the rinse water

High economic efficiency due to long service life of the pickling bath Adaptation to individual needs possible through precise resharpening



#### General instructions for use

- Remove dirt, grease or oil residues before treatment with acidic cleaner (Pelox Surface Cleaner FR-D) or alkaline degreaser (Pelox Cleaning and Degreasing Agent AR 90)
- Optimum surface qualities and pickling times require intelligent bath management. This requires knowledge of the acid content and metal enrichment (iron content) in the pickling bath
- We can prepare these analyses on request in order to optimally adjust the sharpening concentrate to your quality requirements
- Avoid direct sunlight and high ambient temperatures (recommended storage and processing temperature: 5 25 °C)
- Observe safety data sheet and wear personal protective equipment
- Ensure proper wastewater treatment and disposal of residual materials
- All information is non-binding subject to change





# DIP PICKLING

## PHYSICAL AND CHEMICAL PROPERTIES

State of aggregation: Form:
Color:
Odour:
pH value: Density at 20 °C:

fluid fluid colorless stinging <1 1,19 g/cm<sup>3</sup>

#### LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Signal word: Hazardous components: GHS05 GHS06 Danger Hydrofluoric acid



## DANGER AND SAFETY INFORMATION

#### Hazard warnings:

#### H290; H300+H310; H314; H331

May be corrosive to metals. Fatal if swallowed or in contact with skin. Causes severe skin burns and eye damage. Toxic if inhaled.

#### Safety instructions:

#### P260; P280; P303+P361+P353; P305+P351+P338; P310; P403+P233

Do not breathe mist/vapours/spray. Protective gloves/protective clothing/eye protection/face protection

IF ON SKIN (or hair): Remove/shower immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing. Immediately call a POISON CENTER/doctor. Store in a well-ventilated place. Keep container tightly closed.

### **OTHER HAZARDS**

Risk of slipping due to leaking/spilled product.

PBT assessment: According to information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be PBT.

vPvB assessment: According to the information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be vPvB.







Treatment of titanium surfaces Removes tarnish, scaling and foreign contaminants in one step Supplied as a concentrate (add water) Also available as a ready mix and resharpener

#### Individual characteristic

Due to specially adjusted acid concentrations, particularly suitable for reactive Surfaces such as titanium

Termination of the embrittlement process by subsequent - mandatory - passivation of the surface



#### General instructions for use

The respective product must be tested for suitability before use (pre-test)

Remove dirt, grease or oil residues before treatment with alkaline degreaser (Pelox cleaning and degreasing agent AR 90) Optimum surface quality and pickling times require intelligent bath

management. This requires knowledge of the acid content and metal enrichment (iron content) in the pickling bath We can carry out these analyses on request in order to optimally adjust the sharpening concentrate to your quality requirements Avoid

direct sunlight and high ambient temperatures (recommended storage and processing temperature: 5 - 25 °C)

Observe the safety data sheet and wear personal protective equipment. Observe proper

wastewater treatment and disposal of residual materials. All information is non-binding - subject to change.





State of aggregation: Form:
Color:
Odour:
pH value: Density at 20 °C:

fluid fluid colorless biting <1 1,20 g/cm<sup>3</sup>

## LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Signal word: Hazardous components: GHS05 GHS06 Danger Hydrofluoric acid Nitric acid ...

% [C ÿ 70%]



## DANGER AND SAFETY INFORMATION

#### Hazard warnings:

#### H290; H301+H311+H331; H314

May be corrosive to metals. Toxic if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

#### Safety instructions:

#### P260; P280; P303+P361+P353; P305+P351+P338; P310; P403+P233

Do not breathe mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Store in a well-ventilated place. Keep container tightly closed.

#### Additional hazard characteristics:

EUH071

Corrosive to the respiratory tract.

## **OTHER HAZARDS**

Risk of slipping due to leaking/spilled product.

PBT assessment: According to information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be PBT.

vPvB assessment: According to the information submitted in the supply chain, the mixture does not contain any substance with >0.1% considered to be vPvB.

