

**Date of issue:** 2003-03-18  
**Revision date:** 2005-11-14  
**In accordance with:** ISO 11014-1 and 2001/58/EC  
**Document:** I001616 Ver.5

## 1. IDENTIFICATION OF PREPARATION AND COMPANY

**Product identifier:** Cleaning products for stainless steel  
**Manufacturer:** Avesta Welding AB, Finishing Chemicals  
 Lodgatan 14, 211 24 MALMÖ, Sweden  
 Telephone: +46 (0)226 82100  
**Application and use:** Rust removal and cleaning of stainless steel and aluminium  
**Trade name:** Avesta OriginalFinish™ - Rust Remover 410

### Emergency numbers

|           |   |        |   |
|-----------|---|--------|---|
| Australia | 131126 (National)<br>+61-2-98453111 (International) | Italy  | +39-2-66101029 (Milan)<br>+39-6-3054343 (Rome)        |
| France    | +33-1-40370404 (Paris)<br>+33-4-72116911 (Lyon)     | Spain  | +34-91-5620420 (Madrid)                               |
| Finland   | +358-(0)9-471977 (Helsinki)                         | Sweden | 020-996000 (National)<br>+46-8-331231 (International) |
| Germany   | +49-89-19240 (Munich)<br>+49-228-2873211 (Bonn)     | UK     | +44-1-132450530 (Leeds)                               |
|           |   | USA    | 800-424-9300 (Chemtrack)                              |

## 2. INFORMATION ON INGREDIENTS

### Preparation

**Chemical nature:** Colourless Acid solution with corrosive properties.

| Hazardous components, chemical name, formula              | CAS No.   | EEC No.   | Contents weight-% | Risk Code/ R-phrase* |
|---|-----------|-----------|-------------------|----------------------|
| Phosphoric acid , H <sub>3</sub> PO <sub>4</sub>          | 7664-38-2 | 231-663-2 | <20               | C: R34               |
| Oxalic acid, H <sub>2</sub> C <sub>2</sub> O <sub>4</sub> | 144-62-7  | 205-634-3 | <5                | Xn: R21/22           |
| Stabilizing agents  |           |           | <1                | Xi: R41              |
| Additives   |           |           | <2                | Xi: R38, R41         |

\*The full texts of the phrases are shown in section 16.

**Additional information:** Classification according to directive 67/548/EEG.

Symbols and risk phrases are for concentrated substances.

### 3. HAZARDS IDENTIFICATION

**Health hazard in case of accidental exposure (R-phrases):** R 36/ 38 Irritating to eyes and skin

**Environmental effects:** Will reduce pH in water. Hence should be neutralised.

### 4. FIRST AID MEASURES

Measures to be taken immediately after the following ways of contact with pickling acids.

**Inhalation:** Fresh air and rest. Rinse nose and mouth with water.

**Ingestion:** Drink at once, preferably milk or water. Do not cause vomiting.

**Skin contact:** Rinse with water.

**Eye contact:** Rinse immediately with plenty of water for at least 15 minutes.

### 5. FIRE FIGHTING MEASURES

**Danger of fire/explosion:** Fluid is non-flammable. Bottles close to fire should be removed or cooled with water.

**Extinguishing media:** Chose media depending on what's burning.

**How to clean or destroy soiled fire equipment:** Thoroughly wash with water.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid direct contact. Wear eye- protection, skin-protection and rubber gloves. Keep good ventilation.

**Environmental precautions (water, air, soil):** Prevent spillage from entering sewage or public waters.

Methods for cleaning up: Neutralise with Avesta Neutralising Agent or a strong alkaline compound i.e. slaked lime. Embank with sand. Arrange for pick up. Rinse with plenty of water.

**Spillage and decontamination:** Spillage should be picked up and disposed of in full compliance with federal, state and local regulations as acid waste.

### 7. HANDLING AND STORAGE

#### Handling

**Technical measures:** Working place and methods should be worked out in order to avoid direct contact. Keep good ventilation.

**To prevent fire and explosion:** Bottles close to fire should be removed or cooled with water.

**Precautions:** Avoid fume generation and accumulation by using in a well-ventilated area. Use in areas having local exhaust and general ventilation.

Possibilities to rinse the eyes with water should be available at the working place.

#### Storage

**Technical measures:** Storage room should be kept separate, cool, dry and closed to unauthorised persons.

**Incompatible products:** Not applicable

**Storage conditions:** Keep containers securely closed when not in use and in an upright position. Store in areas where temperature remains between 0-30 °C at all times.

**Packaging materials:** Packaging material must be of acid resistant plastic material.

**Shelf life:** At least 2 years in unopened bottle correctly stored.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering controls:

Local exhaust ventilation is recommended, use personal protective equipment.

**Exposure limits:** Limiting values: phosphoric acid LLV 1 mg/m<sup>3</sup>.

#### Personal protective equipment

**Hand protection:** Acid resistant rubber-gloves.

**Eye protection:** Face shield.

**Skin and body protection:** Rubber boots and acid resistant clothes, which covers all body parts exposed to splashes.

**Specific hygienic measures:** Do not inhale fumes, avoid direct contact.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical state (form, colour, smell) at 20°C:

Transparent liquid with a slight smell.

**Boiling point:** 80-100°C

**Flash point / Explosion properties:** Not applicable.

#### Specific temperatures:

Solid-fluid 0°C, Fluid-gas 80-100°C

**Vapour pressure at 20°C:** < 0.01 kPa

**pH:** 0 at 20°C

**Density:** 1.1 g/cm<sup>3</sup> at 20°C

**Solubility in water at 20°C:** 100 weight %

**Solubility in organic solvents:** Not applicable.

### 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions, polymerization will not occur.

**Conditions to avoid:** Avoid high temperatures, must not be exposed to direct sunshine. When heated phosphoric gases will be developed.

**Material to avoid:** Alkaline compounds and water, will give an exothermic reaction, with heat development.

**Hazardous decomposition products:** Will emit phosphoric gases and hydrogen gas.

## 11. TOXICOLOGICAL INFORMATION

### Local effects

**Effects on the skin:** Prolonged contact may be irritating.

**Effects on the eyes:** Irritating to eyes.

**After ingestion:** May give pain, vomiting and diarrhoea.

**Upon inhalation:** Inhalation of fumes or mist might cause aches, cough and difficulty in breathing. Risk for oedema on the lungs.

## 12. ECOLOGICAL INFORMATION

### Environmental effects

**Mobility:** The product in its concentrated form will lower the pH of ground water and may not be discharged into the Clearwater system without pre-treatment.

**Bioaccumulation:** The product is not regarded as bioaccumulative.

## 13. DISPOSAL CONSIDERATIONS

### Methods of disposal

**Waste from residues:** Contaminated residues i.e. wastewater must be neutralised to correct its pH-value to pH 6-11, and heavy metals resulting from the cleaning of stainless steel should be removed. Neutralise with Avesta Neutralising Agent or slaked lime.

**Contaminated packing:** Rinse with plenty of water.

**Additional information:** A filtration system for rinse water is recommended. Effluent must be separated and disposed of as acidic waste. Consult with your local authorized and licensed waste disposal agency and ministry of environment for instructions and procedures for approved waste disposal.

## 14. TRANSPORT

No specific precaution.

## 15. REGULATORY INFORMATION

### Regulations

No specific regulations.

### Danger symbols:



Irritant

### Sentences expressing the risks

**R 36/38:** Irritating to eyes and skin.

### Sentences about safety measures

**S 25:** Avoid contact with eyes.

## 16. OTHER INFORMATION

**Training advice:** The Avesta Finishing Chemicals "Handbook for the pickling and cleaning of stainless steel" and "Guidelines for Planning and Designing a Pickling Workshop".

**Recommended applications and restrictions:** Only for the cleaning of stainless steel (aluminium), not to be used on other metals.

**Basic information sources used to draw up the information cards:** Standard Practice for cleaning stainless steel (ASTM-A-380), International Standard ISO 11014-11, Commission Directive 2001/58/EC

### The full texts of the R-phrases in section 2 are:

**R 34:** Causes burns.

**R 38:** Irritating to skin

**R 41:** Risk of serious damage to eyes

**R 21/22:** Harmful in contact with skin and if swallowed.

**Changes made:** 2005-11-14 new recipe.