

## MATERIAL SAFETY DATA SHEET FOR PICKLING PASTE

Trade Name : SWP PICKLING PASTE  
Manufacturer : Specialised Welding Products Ltd  
Date of Issue : 5.11.96.

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : SWP Pickling Paste  
Package : 2kg container  
Application : Pickling of stainless steels

#### Manufacturer

Company Name: Specialised Welding Products Ltd  
Address : 12 Farringdon Industrial Centre, Hampshire, GU34 3DP ENGLAND  
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Contact : Kevin Holton

### 2. COMPOSITION INFORMATION ON INGREDIENTS

#### Preparation

Chemical Nature: Strong acid paste with corrosive properties

Hazardous components Chemical name/formula	CAS-No	EEC-No	Contents	Risk Code (for the preparation of R-phrase)
Nitric Acid / HNO <sub>3</sub>	7697-37-2	231-714-2	Approx. 30%	C-corrosive / R35
Hydrofluoric Acid / HF	7664-39-3	231-634-8	Approx. 5%	T-toxic / R23, 24, 25, 35

Additional Information : Classification according to directive 67/548/EEC.

### 3. HAZARDS IDENTIFICATION

Health hazard in case of accidental exposure (R/phrases) : R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R35 Causes severe burns.  
Environmental effects : Pickling paste will reduce pH in water. Must be neutralised.  
Physical and chemical : When heated, nitrous gases will develop. Only for  
Risks : treatment of stainless steel. Not to be used on any other Metals.

### 4. FIRST AID MEASURES

#### Measures to be taken immediately after contact with pickling acids (5% W/W Hydrofluoric Acid)

Inhalation : Fresh air and rest. Rinse nose and mouth with fresh water. Oxygen breathing apparatus may be necessary. Seek medical attention if necessary.  
Ingestion : Drink either water or milk immediately. Thereafter take 10-15 lime tablets dissolved in water. Do not induce vomiting. Seek medical care.

#### 4. FIRST AID MEASURES (continued)

**Skin Contact** Rinse immediately with plenty of water. Rinse and remove contaminated clothes. Treat with calcium containing agent to neutralise harmful fluoride-ions.

##### Alternatives

a) HF antidote gel containing 2.5% Calcium Gluconate manufactured by Industrial Pharm. Serv. Manchester UK. b) Dissolve calcium tables (mnfg – Sandoz-Pharm) 20 tablets into 2 litres of water, swab or immerse affected area.

c) If A or B could not be done, the skin could be bathed with milk or calcium containing solution.

After the above, seek medical attention.

**Eye Contact** Rinse immediately with plenty of fresh water for at least 15 minutes. Thereafter consult an eye doctor.

**Information for medical care** Inform the doctor the injury has been caused by contact with Hydrofluoric and Nitric acid solution. Antidote treatment after contact is with 2.5% Gluconate Gel (HF-Antidote Gel, supplier Industrial Pharm. Serv. Manchester UK).

#### 5. FIRE FIGHTING MEASURES

**Danger of fire/explosion** Paste is non flammable. If in contact with metals, hydrogen gas is formed in small quantities which together with air can give an explosion. Bottles close to fire should be removed or cooled with water.

**Extinguishing media** Released product should be neutralised with slaked lime.

**Chemical exposure risks**

**Caused by :**

SWP Pickling Paste

Released gases/vapours

Protective clothing for the

Firemen

How to clean or destroy

Soiled fire equipment

The product will cause redness and blisters on skin contact

The product will emit toxic fumes and nitrous gases in the presence of heat/fire.

Normal protective clothes. Breathing protection gas mask

chlorine filter type B (grey) and dust filter P2 to CEN

Wash thoroughly with large volumes of water.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** Avoid direct contact with product. Wear eye and skin protection, rubber gloves and breathing apparatus. Maintain adequate ventilation.

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

**Cleaning up methods** Neutralise with Neutralising Agent or strong alkaline compound i.e. slaked lime. Contain with sand. Arrange for pick up. Rinse with large volumes of water.

**Spillage and decontamination** Spillages should be collected and disposed of via approved waste disposal authority.

#### 7. HANDLING AND STORAGE

##### Handling

**Technical measures**

**To prevent fire and explosion water.**

Work area and operational procedures should be designed

to avoid direct contact with product. Work in a well ventilated area. Rinse water should be contained for treatment and disposal.

Bottles close to fire should be removed or cooled down Precautions with

Avoid fume accumulation by using in a well ventilated area. Use in areas with general ventilation and, if inadequate, use forced ventilation. Facilities to rinse eyes with water must be available at all times. Eye bath 3% Magnesium sulphate solution and Calcium Gluconate Gel for treatment after skin contact should be readily available at the work place.

##### Storage

**Technical measures**

**Incompatible products**

**Storage conditions**

**Packaging materials**

**Shelf life**

Store room should be separate, warm, dry and closed to all unauthorised personnel.

Not applicable.

All containers should be kept securely closed when not in use and in an upright position. Store in areas where temperature remains constant between 0 – 40°C.

Must be of an acid resistant plastic material.

If bottles are stored correctly – 1 year.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering	Isolate work area from carbon steel applications.
Control parameters	Limiting values: CLV 1.7mg/m (8 hrs)–Hydrofluoric Acid LLC 5 mg/m (15mins) – Nitric Acid

### Personal protective equipment

Respiratory	Gas mask with chlorine filter type B(grey) & dust filter P2
Hands	Rubber gloves
Eyes	Face shield, goggles
Skin and body	Rubber boots and acid resistant clothes

### Specific hygiene measures

**Do not inhale fumes and avoid contact with eyes, skin and clothes. Do not drink, eat or smoke in the working area. Remove any contaminated clothing immediately. Always wash hands and face well after working with the product.**

**Calcium Gluconate Gel 2.5% and 3% Magnesium Sulphate Solution must be readily available at all times at the working place.**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

State at 20°C	Colourless transparent colloid
Boiling point	80–100 °C
Flash point	Not Applicable
Specific temperatures	
Vapour pressure at 20°C	<0.01 Kpa
PH	1.0 at 20°C
Density	1.2–1.3g/cm at 20°C
Viscosity at 23°C	>10000MPaS
Solubility	Freely soluble in water

## 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to avoid	Direct sunlight and high temperatures. When heated nitrous gases develop.
Materials to avoid	Alkaline compounds and water, will give an exothermal reaction with heat development.
Hazardous decomposition	<b>Will emit nitrous gases and hydrogen gas.</b>

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

LD (orally)	650 mg/kg
LC (dermal)	200 ppm/1 hour

### Local Effects

On the skin	Corrosive burns with yellowish discolouration, blisters and slow healing wounds.
On the eyes	Intensive pain and corrosive damage. Risk of irreparable damage.
Ingestion	Causes corrosive burns with burning pain, severe general effect and could damage the kidneys and liver.
Inhalation	Inhalation of fumes could cause aches, coughs and difficulty to breathe. Risk of oedema on the lungs.
Additional information	Symptoms of corrosive damage will not appear immediately.

## 12. ECOLOGICAL INFORMATION

Effects on Environment	The pickling paste will reduce the pH of fresh water and should not be discharged to any clean water system without being pre-treated first.
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### Information for constituent Nitric Acid

Environmental Effect	Slightly toxic to living resources
Aquatic Fate	Toxic to freshwater and saltwater fish. Biodegradable in fresh water and saltwater, leading to oxygen depletion. No evidence of bioaccumulation or tainting of seafood.

### Information for constituent Hydrofluoric Acid

Environmental Effect	Gaseous HF attacks all plants, sensitivity varies between species.
Aquatic Fate	Slightly toxic to aquatic life. No evidence of bioaccumulation or tainting of seafood.

**13. DISPOSAL**  
**Methods of disposal**  
Residue Waste

Contaminated residues, waste water must be neutralised to pH 6-11 and any heavy metals resulting from the pickling of stainless should be removed.

**Neutralise with Neutralising Agent or lime**

Contaminated packing  
Additional information  
Disposal

Rinse with copious amounts of water.

All effluent must be separated and disposed of via recognised waste authority. Consult your local licensed waste disposal company for instructions on how to dispose of acidic waste.

**14. TRANSPORT**  
**International Regulations (UN)**

**UN-Classification Code** UN 1790

**Additional Information** The pickling paste is to be transported according to dangerous goods regulations.

**UN Substance identification** 2922

**Shipping Name** PICKLING PASTE

**Packing Group** 11

**Class** 8 – CORROSIVE

**Subsidiary Risk** 6.1

**Supply Symbol** CORROSIVE – VERY TOXIC

**Hazchem Code** 2XE

**HSCN (Tariff No.)** 280800000

**15. REGULATORY INFORMATION**

**Safety Phrases** S2, S7/9, S23, S26, S27, S36/37/39, S38, S45

**Risk Phrases** R23, 24, 25, R35

Recipients of this MSDS must refer to relevant legislation that implements provisions relating to the protection of man or the environment.

The information contained in this document does not constitute the users own assessment of workplace risks as required by other health and safety legislation.

**16. OTHER INFORMATION**

The user should be trained to handle chemicals and be fully aware of the product hazards. Read the label before opening the container.

The first-aid of Work Regulations of 1981 indicate extended training for qualified first aiders working on sites where hydrofluoric acid is present. The extended training consists of a half-day course conducted by an HSE approved centre.

Training is obtainable from : Midlands Occupational Health Service Ltd  
Pettit House, 83 Birmingham Road  
West Bromwich, West Midlands, B70 6PX  
Tel : 0121 553 7116

Or contact your HSE area office for further information.

We wish to point out that this MSDS refers to the product and not to its dilutions, when the associated risks may be reduced.

The information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specification of the product. The user must satisfy himself that the product is entirely suitable for his purpose.

**DATA SOURCES** Supplier Material Data Sheet  
National and International regulations

**VERSION / DATE** (5.11.96) MSDS ref : EEP

**CHEMICALS – A division of Edentec Industrial (Pty) Ltd.**

**PICKLING PASTE**

**TREMCARD**

**CORROSIVE – ACID  
 ( LIQUIDS / SOLIDS )**

**IMMEDIATE ACTION BY DRIVER : NOTIFY POLICE AND FIRE BRIGADE**

- If possible move vehicle to open ground and stop engine
- Warn everybody – corrosive hazard
- Evacuate area if necessary
- Mark roads and warn other road users
- Keep public away from danger area
- Keen upwind
- No smoking
- No open sources of ignition

<b>HAZARD / SYMPTOMS</b>	<b>PREVENTION / PPE</b>	<b>FIRST AID / FIRE EXTINGUISHING</b>
<b>FIRE</b> Non-flammable. Toxic or flammable gases may be produced - in fires	Wear full protective clothing and self-contained breathing	Dry chemical foam. Use water spray to keep containers cool
<b>INHALATION</b> Irritation, burning to eyes, nose and respiratory tract.	Avoid inhalation. Solid. Use suitable respiratory protection in confined areas.	Remove patient to fresh air. Administer artificial respiration or oxygen if breathing is difficult. Consult a doctor if difficulties persist.
<b>SKIN</b> Severe irritation or burning, blistering.	Avoid contact. Wear protective gloves, boots and other clothing.	Remove contaminated clothing. Wash affected skin with water. Consult a doctor if irritation persists.
<b>EYES</b> Severe irritation, burning.	Wear protective goggles or face shield.	Immediately flush eyes with water for at least 15 minutes. Consult a doctor.
<b>INGESTION</b> Harmful if swallowed. Burning of mucus membrane, nausea, vomiting, diarrhoea.	Avoid ingestion. Wear face shield.	Do not induce vomiting. If conscious, allow a drink of milk or water. Obtain medical attention immediately.

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