

## Safety Data Sheet

## Avesta RedOne™ Paste 140

This Safety Data Sheet contains information to help users understand the potential hazards relating to this product and provides advice for risk management. This information must be shown to or made available to those who may come into contact with the material or are responsible for the material. This Safety Data Sheet is prepared in accordance with GHS, as adopted by the UN Economic and Social Council (ECOSOC) in July 2003. Reference is also made to Australian the Hazardous Substances Information System (HSIS), released by the National Occupational Health and Safety Commission (NOSH).

### 1. Identification of the Substance and Supplier

Trade name	Avesta RedOne™ Pickling Paste 140
Description	Red gel containing a mixture of strong inorganic acids and salts for metal treatment.
Issue date:	2010-09-15, 1
Supplier:	Bohler Uddeholm (Australia) Pty Ltd 129-135 McCredie Road GUILDFORD NSW 2161 AUSTRALIA Tel: +61-2-9681 3100 Fax: +61-2-9632 6161 E-mail: <a href="mailto:bwa@buau.com.au">bwa@buau.com.au</a>

**In case of emergency call:**

24 hour contact Ph: 131126 (National), +61-2-98453111 (International).

In case of non-emergency assistance 9am to 5pm Monday to Friday: +61-2-9681 3100

### 2. Hazards Identification

The product is considered dangerous if in contact with skin, eyes or if ingested.

Classification GHS	DANGER Skin Corrosion, Category 1A Acute toxicity, Category 3 Toxic if swallowed, Toxic in contact with skin, Toxic if inhaled Causes severe skin burns and eye damage
Classification HSIS	C Corrosive R35, T Toxic R23/24/25

Contact with skin and eyes may cause severe damage without rapid first aid. Inhalation of spray may cause irritation and severe damage to the respiratory tract. Ingestion will lead to damage of the GI tract and will be toxic if swallowed. There are no known long-term health effects resulting from exposure.

The product is not considered as Dangerous to the Environment, although due to the acidic nature of the product, care should be taken to avoid direct loss to the environment.



### 3. Composition

CAS	Name	Content	Class (GHS)	WHMIS
7697-37-2	Nitric acid	15 - 25%	Category 3 Oxidising Category 1 Corrosive	O, C R8 C, R35
7664-39-3	Hydrofluoric acid	4 - 7%	Category 1 Acute Toxic Category 1 Corrosive	T+ R26, 27, 28 C, R35

Contains metal salts in water.

The classification descriptions given in this section relate to the components in their pure form and do not correspond to the classification of this preparation.

### 4. First Aid Measures

#### Inhalation

If exposed to spray or fumes, move to area of fresh air. If any signs of adverse effect, obtain medical advice. Treatment should be consistent with effects from acid exposure.

#### Skin contact

Wash skin immediately with water and keep affected areas under flowing water. Treat with Calcium Gluconate Gel.

Obtain medical advice if continued signs of irritation or discomfort are noted. Treatment should be consistent with effects from acid exposure.

#### Eye contact

Flush eyes immediately with plenty of water for at least 15 minutes. Seek immediate medical advice. Treatment should be consistent with effects from hydrofluoric acid exposure.

#### Ingestion

If swallowed, rinse mouth thoroughly and drink small quantity (500 ml) of water/milk or calcium/magnesium containing antacid. Do not induce vomiting. Obtain medical advice immediately.

**Note to medical staff:** Treat as for hydrofluoric acid. Rapid first aid is essential in case of contact.

### 5. Fire fighting Measures

Not flammable

#### Extinguishing media

If in the vicinity of a fire, there are no known adverse reactions to any normal extinguishing media. The material is not known to be reactive with any extinguishing media.

#### Special exposure hazards (*from the material or its combustion products*)

Normal combustion products are not considered to be specifically hazardous.

#### Special precautions for fire fighters

None

## 6. Accidental release measures

### Personal precautions

Remove unnecessary personnel away from area of spill or contamination.  
During cleaning, protective clothing should be worn to avoid contact with skin and eyes.

### Environmental precautions

Prevent spilled material or washings entering water courses or storm-water drainage systems. Diluted product and washings may be discharged into foul-water systems leading to waste water treatment plants.

### Methods for cleaning up

Spills of up to 5 litres can be rinsed away to waste water drains with large quantities of water. If not possible, absorb onto sand, sawdust or other suitable material. Residues should be collected and disposed of as chemical waste in suitably labelled containers. If the spillage is greater than 5 litres, contain spill and call in trained personnel. Follow supplier recommendations for neutralisation.

The area contaminated by the spill should be washed with water.

## 7. Handling and storage

### Handling

Other than the use of goggles, acid resistant gloves and coveralls, no special handling precautions are required. See section 8 for more details.

### Storage

Store in original containers between 0 – 30°C. No special precautions.

## 8. Exposure controls/personal protection

### Hydrofluoric acid

Australian exposure limits set (NOHSC), 3 ppm (TWA) as hydrogen fluoride  
US OSHA Permissible Exposure Limit (PEL): 3 ppm (TWA) as hydrogen fluoride  
US ACGIH Threshold Limit Value (TLV): 3 ppm Ceiling as fluorine  
DNEL has not been determined, but no long term health effects are known.

### Nitric acid

Australian exposure limits set (NOHSC), 2ppm (TWA), 4ppm (STEL)  
US OSHA Permissible Exposure Limit (PEL): 2 ppm (TWA), 4 ppm (STEL)  
US ACGIH Threshold Limit Value (TLV): 2 ppm (TWA); 4 ppm (STEL)  
DNEL has not been determined, but no long term health effects are known.

### Respiratory protection

None required during normal handling. Use in well ventilated areas and avoid formation of spray, aerosols or fumes.

### Hand protection

Suitable chemical resistant gloves recommended for use with acid materials and resistant to acids. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

### Eye protection

Goggles must be worn when handling this product.

### Skin protection

Coveralls recommended. These should be changed after use or if contaminated. Wash before re-use.

### Environmental exposure controls

When handling small quantities (less than 5 litres), no special precautions required. If handling bulk material, precautions should be taken to avoid accidental release to water courses.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Red gel
<b>Freezing point</b>	< 0°C
<b>Boiling point</b>	Ca 100°C, fluid – gas vapour release for nitric/hydrofluoric acid 50 – 60 °C
<b>Relative density</b>	1.2 – 1.4
<b>Water solubility</b>	Miscible in water, pH 0
<b>Flash point</b>	> 100°C
<b>Vapour pressure</b>	Acid fumes may be released, especially at elevated temperatures

## 10. Stability and Reactivity

### Conditions to avoid

The material is considered to be stable under normal conditions. Store away from direct sunlight and avoid elevated temperatures

### Materials to avoid

Avoid contact with alkaline materials and strong oxidising or reducing agents.

### Hazardous decomposition products

None known

## 11. Toxicological Information

The preparation has not been tested but the effects can be estimated using the criteria covered by GHS and through using NOSHC guidance. Corrosive effects are predicted through consideration of the very low pH.

Acute oral toxicity	Corrosive; considered toxic if swallowed
Eyes	Will cause severe eye damage to low pH
Skin	Considered corrosive to skin, GHS Category 1A
Sensitiser	None of the components are considered to be sensitisers
Inhalation	Inhalation of vapours, spray or aerosol may cause severe irritation to respiratory tract. Considered toxic by inhalation.
Long-term toxicity	None of the components are listed as CMR*

(\*Carcinogenic, mutagenic or reproductive toxin)

## 12. Ecological Information

The preparation has not been tested but there are no components present at concentrations that will cause the preparation to be classified as Dangerous to the Environment. The low pH may cause local damage if released into the environment.

There are no components considered to be persistent or bioaccumulative.

## 13. Disposal Considerations

It is recommended to dispose of small quantities of this material (< 5 litres) by flushing with an excess of water to foul drainage. A dilution factor of 100 is recommended. Larger quantities of waste should be treated as hazardous chemical waste in a manner that complies with local regulations. Advice should be sought from local agencies.

The containers should be rinsed thoroughly with water and can be disposed of as non-hazardous waste.

Careful neutralisation may be possible. Follow supplier recommendations.

## 14. Transport Information

UN proper description and shipping name:  
CORROSIVE LIQUID, TOXIC, N.O.S. (nitric acid, hydrofluoric acid).  
Hazard class 8 (6.1)  
Packing group II  
UN Number 2922  
Hazchem Code 2X

## 15. Regulatory Information

### Classification GHS



**DANGER**  
Skin Corrosion, Category 1A  
Causes severe skin burns and eye damage



**DANGER :**  
Acute toxicity, Category 3  
Toxic if swallowed  
Toxic in contact with skin  
Toxic if inhaled

Classification HSIS      C Corrosive, R35    T Toxic, R23/24/25

## 16. Other Information

Details of R phrases in Section 2, 3 and Section 15,

O Oxidising R8                      Contact with combustible material may cause fire  
T+ Very toxic, R26/27/28          Very toxic by inhalation, in contact with skin and if swallowed  
T Toxic R23/24/25                  Toxic by inhalation, in contact with skin and if swallowed.  
C Corrosive R35                      Causes severe burns

More information can be found in the publication "Working with hydrofluoric acid" from Government of Western Australia Department of Commerce.

Check instructions for use before using.

Changes since last revision:

Section 4 – Changed first aid measures  
Layout and document number.

**Manufacturer:**

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