

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019



Version number 5

Revision: 11.02.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Avesta Pickling Bath 302
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Surface treatment of stainless and high alloyed steels
- **Uses advised against** Other materials than stainless and high alloyed steels
- **Details of the supplier of the safety data sheet**
- **Manufacturer:**
voestalpine Böhler Welding Nordic AB
Lodgatan 14 SE-211 24 Malmö, Sweden
Tel: +46 (0)40 - 28 83 00 Fax: +46 (0)40 - 93 94 24 www.voestalpine.com/welding
- **Supplier and further information available from:**
MidwayMetals Pty Ltd Woody Colling
+61 403 059 629
woody@midwaymetals.co.au
- **Emergency telephone number:** Tel: +44-8701906800 (English)
Midway Metals Pty Ltd +61 7 3287 2811 (Aust EST Mo-Fr 7:30am to 5pm)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Acute Tox. 2 H300 Fatal if swallowed.
Acute Tox. 1 H310 Fatal in contact with skin.
Acute Tox. 2 H330 Fatal if inhaled.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
- **2.2 Label elements -**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**


 GHS05 GHS06
- **Signal word** Danger
- **Hazard-determining components of labelling:**
nitric acid
hydrogen fluoride
- **Hazard statements**
H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P260 Do not breathe mist/vapours/spray.

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 1)

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

- **Additional information:**

EUH071 Corrosive to the respiratory tract.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 7697-37-2 EINECS: 231-714-2 Index number: 007-004-00-1 Reg.nr.: 01-2119487297-23	nitric acid ⚠ Acute Tox. 2, H330 ⚠ Met. Corr. 1, H290; Skin Corr. 1A, H314	25-50%
CAS: 7664-39-3 EINECS: 231-634-8 Index number: 009-003-00-1 Reg.nr.: 01-2119458860-33	hydrogen fluoride ⚠ Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330 ⚠ Skin Corr. 1A, H314	12.5-25%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **Description of first aid measures**

- **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Seek medical treatment.

- **After inhalation:** Supply fresh air or oxygen; call for doctor.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After rinsing, rub in Ca-gluconate solution or Ca-gluconate gel immediately.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Seek medical treatment.

- **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
Hydrogen fluoride (HF)
During heating or in case of fire poisonous gases are produced.
Nitrogen oxides (NOx)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Not applicable
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Ensure that suitable extractors are available on processing machines
- **Information about fire - and explosion protection:** The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store under lock and key and with access restricted to technical experts or their assistants only.
Store in 5-35° C. Heat and sunlight will increase pressure and may lead to the bottle to swell.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 3)

- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

7697-37-2 nitric acid

WEL Short-term value: 2.6 mg/m³, 1 ppm

7664-39-3 hydrogen fluoride

WEL Short-term value: 2.5 mg/m³, 3 ppm
Long-term value: 1.5 mg/m³, 1.8 ppm

- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter BE P3

· Protection of hands:



Protective gloves

Neoprene gloves

· Penetration time of glove material

≥ 8 h

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Safety glasses



Tightly sealed goggles

· Body protection:

Protective work clothing

Use protective suit.

GB

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 4)

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Pungent
Odour threshold:	Not determined.

· pH-value at 20 °C: 0

· Flash point: Not applicable.

· Flammability (solid, gas): Not applicable.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Density at 20 °C: 1.25 g/cm³

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· water: Fully miscible.

· Partition coefficient: n-octanol/water: Not determined.

· Dynamic at 20 °C: 10,000 mPas

· Kinematic: Not determined.

· 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity: No further relevant information available.

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with various metals.

Develops corrosive gases/fumes.

· 10.4 Conditions to avoid: Attacks materials containing glass and silicate.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products:

Nitrogen oxides

Hydrogen fluoride

Nitrogen oxides (NO_x)

GB

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 5)

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity

7664-39-3 hydrogen fluoride

Oral	Beräkningsmetod	6.67 mg/l (Human Being)
------	-----------------	-------------------------

Derma	Beräkningsmetod	6.67 mg/kg (Human Being)
-------	-----------------	--------------------------

Fatal if swallowed, in contact with skin or if inhaled.

· LD/LC50 values relevant for classification:

7697-37-2 nitric acid

Inhalative	LC50/4 h	1.56 mg/l (rat) (OECD 403)
------------	----------	----------------------------

7664-39-3 hydrogen fluoride

Inhalative	LC50/1h	2,240 ppm (rat) (Water free preparation)
------------	---------	--

· Primary irritant effect:

· Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes severe skin burns and eye damage.

· Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

· Germ cell mutagenicity

Based on available data, the classification criteria are not met.

· Carcinogenicity

Based on available data, the classification criteria are not met.

· Reproductive toxicity

Based on available data, the classification criteria are not met.

· STOT-single exposure

Based on available data, the classification criteria are not met.

· STOT-repeated exposure

Based on available data, the classification criteria are not met.

· Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

7697-37-2 nitric acid

LC50	100 mg/l (Fish) (96 H)
------	------------------------

· 12.2 Persistence and degradability

No further relevant information available.

· 12.3 Bioaccumulative potential

Not known to be bioaccumulative

· 12.4 Mobility in soil

No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

· 12.5 Results of PBT and vPvB assessment

· PBT:

Not applicable.

· vPvB:

Not applicable.

· 12.6 Other adverse effects

No further relevant information available.

GB

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 6)

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Must be specially treated adhering to official regulations.

After prior treatment product has to be landfilled or incinerated adhering to the regulations pertaining to the disposal of especially hazardous waste.

· European waste catalogue

11 01 05*	pickling acids
-----------	----------------

· Uncleaned packaging:

· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· Recommended cleansing agents:

Water, if necessary together with cleansing agents.

Diluted caustic solution.

SECTION 14: Transport information

· ADR, IMDG, IATA

UN2922

· 14.2 UN proper shipping name

· ADR

2922 CORROSIVE LIQUID, TOXIC, N.O.S.
(HYDROFLUORIC ACID, NITRIC ACID)

· IMDG, IATA

CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROFLUORIC
ACID, NITRIC ACID)

· 14.3 Transport hazard class(es)

· ADR



· Class

8 Corrosive substances.

· Label

8+6.1

· IMDG



· Class

8 Corrosive substances.

· Label

8/6.1

· IATA



· Class

8 Corrosive substances.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 7)

· Label	8 (6.1)
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Corrosive substances. 86 F-A,S-B
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category · Tunnel restriction code	2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	- UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROFLUORIC ACID, NITRIC ACID), 8 (6.1), II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** H1 ACUTE TOXIC
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 20 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H290 May be corrosive to metals.
H300 Fatal if swallowed.
H310 Fatal in contact with skin.

(Contd. on page 9)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.02.2019

Version number 5

Revision: 11.02.2019

Trade name: Avesta Pickling Bath 302

(Contd. of page 8)

H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.

· **Training hints -**

· **Abbreviations and acronyms:**

NCEC - National Chemical Emergency Centre (=Carechem24)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 1: Acute toxicity – Category 1

Acute Tox. 2: Acute toxicity – Category 2

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

· * **Data compared to the previous version altered.**

GB