according to WHS Regulations

Printing date 19.01.2016 Version number 1 Revision: 19.01.2016

1 Identification

- · Product identifier
- · Trade name: Avesta Moly Drop 960
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Molybdenum identification
- · Uses advised against Other materials than stainelss 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)

2 Hazard Identification

· Classification of the substance or mixture

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · Label elements -
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms



GHS05

- Signal word Danger
- · Hazard-determining components of labelling:

hydrogen chloride

· Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

Do not breathe vapours/spray.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

3 Composition and information on ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

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· Dangerous components:

7647-01-0 hydrogen chloride

Skin Corr. 1B, H314
 STOT SE 3, H335

5-12.5%

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

4 First Aid Measures

- · Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

Seek medical treatment.

- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

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

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

Seek medical treatment.

- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents: Suitable to surrounding conditions.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear fully protective suit.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Pick up mechanically.

Ensure adequate ventilation.

· 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.

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7 Handling and storage

- Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Ensure that suitable extractors are available on processing machines

- · Information about fire and explosion protection: No special measures required.
- · 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.

· Specific end use(s) No further relevant information available.

8 Exposure controls and personal protection

- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

7647-01-0 hydrogen chloride

NES | Peak limitation: 7.5 mg/m³, 5 ppm

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

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 B

Filter P2

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Penetration time of glove material

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

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· Eye protection:

(Contd. of page 3)



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Pasty
Colour: Yellow
Odour: Pungent
Odour threshold: Not determined.

· pH-value at 20 °C:

· Decomposition temperature:

Flash point:Not applicable.Flammability (solid, gaseous):Not applicable.

· Self-igniting: Product is not selfigniting.

• Danger of explosion: Product does not present an explosion hazard.

Not determined.

· Explosion limits:

Lower:Not determined.Upper:Not determined.Relative densityNot determined.Vapour densityNot determined.Evaporation rateNot determined.water:Fully miscible.

Partition coefficient (n-octanol/water): Not determined.
 Dynamic: Not determined.
 Kinematic: Not determined.

Organic solvents: 0.0 %

· Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity
- · Primary irritant effect:
- · Skin corrosion/irritation Caustic effect on skin and mucous membranes.
- · Serious eye damage/irritation Strong caustic effect.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) Nothing known

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · 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.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Must be specially treated adhering to official regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number

· **ADG, IMDG, IATA** UN1789

· UN proper shipping name

· ADG 1789 HYDROCHLORIC ACID solution
· IMDG HYDROCHLORIC ACID solution

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	(Contd. of page
IATA	Hydrochloric acid solution
Transport hazard class(es)	
ADG, IMDG	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Class	8 Corrosive substances.
Label	8
Class	8 Corrosive substances.
Label	- 8
Packing group ADG, IMDG, IATA	II
Environmental hazards:	<u>"</u>
Marine pollutant:	No
Special precautions for user	Warning: Corrosive substances.
Danger code (Kemler):	80
EMS Number:	F-A,S-B
Transport in bulk according to Annex	
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
ADG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category	2
Tunnel restriction code	- E
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (ÉQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	
	UN 1789 HYDROCHLORIC ACID SOLUTION, 8, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Australian Inventory of Chemical Substances

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

7647-01-0 hydrogen chloride

S5, S6

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS). (Contd. on page 7)

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Safety data sheet

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· Hazard pictograms



- · Signal word Danger
- · Hazard-determining components of labelling:

hydrogen chloride

· Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

Do not breathe vapours/spray.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I hydrogen chloride
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

- · Department issuing MSDS: QHES
- · Contact: Mirna Castro
- · Abbreviations and acronyms:

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

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)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3