bsi.





# Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Atlantic Service Company (UK) Ltd

Willow Road

Pen-Y-Fan Industrial Estate Croespenmaen, Crumlin

Newport NP11 4EG United Kingdom

Holds Certificate Number:

FM 34298

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Manufacture supply of sale and rental saw blades and associated equipment for the food industries. Provides a wide range of blades for machine and hand operation and offers sales and rental contracts.

For and on behalf of BSI:

Andrew Launn, EMEA Systems Certification Director

Original Registration Date: 1996-06-14

Latest Revision Date: 2021-02-03

IAF



Effective Date: 2021-03-04 Expiry Date: 2024-03-03

Page: 1 of 1

...making excellence a habit."

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract. An electronic certificate can be authenticated online.

Printed copies can be validated at www.bsigroup.com/ClientDirectory



#### TO WHOM IT MAY CONCERN

RE: Commission Regulations (EC) No 1935/2004, No 2023/2006 and No 1907/2006, and OSHA 29 CFR 1910.1000 and EPA RCRA 40CFR261

I can confirm that all the blades and / or the coil that we supply are manufactured using steel supplied from Voestalpine, Stahlwerk Unna or JB & S Lees (Liberty Steel), and in the case of Stainless Steel by Dosko. We enclose documentation from the above-named suppliers that confirm that the steel they supply us with is in compliance with EC and US regulations.

We are ISO 9001:2015 registered and have a documented quality control system in place that ensures that the blades and/or coils we manufacture are consistently produced and controlled to ensure conformity.

We can confirm that the oil used on our band saw and hand saw blades is a highly refined food safe medicinal white oil and we have attached the data sheets for it. If we supply you with wrapped blades we can confirm that the paper used is approved as suitable for the packaging of metals which are used in direct contact with food and that the printing inks used are not transferred to the inside of the paper that is in contact with the blade. We have also enclosed the relevant paper data sheet and certificate.

Yours faithfully,

H.A. Janes

Mr. H. A. James Managing Director



STAHLWERK UNNA GmbH & Co. KG

Edisonstraße 27 59199 Bönen

Tel. +49 2383 9217-0 Fax +49 2383 9217-123 info@stahlwerk-unna.de www.stahlwerk-unna.de

STAHLWERK UNNA GmbH & Co. KG · Edisonstr. 27 · 59199 Bönen

## To whom it may concern

06.02.2017

Statement on: Information requirements for suppliers of articles according to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), published on 30 December 2006 in the Official Journal of the European Union 396/1.

Dear Sir or Madam,

We thank you for your request regarding our information requirements for "Substances of Very High Concern" ("SVHC"; Candidate List of Substances of Very High Concern for authorisation) in our articles according to Article 33 of the REACH-Regulation (EC) No 1907/2006 (REACH). As "downstream user" and as "supplier of an article" under REACH we are forced to pass on information along the supply chain. Unfortunately it is unclear to many companies what these information requirements actually mean. This often results in situations where companies along the supply chain urge each other to confirm "REACH compliance" of articles. Such statements are not intended by REACH. For companies they only cause additional expenses, but generate neither legal certainty nor other real benefit. Therefore we would like to inform you what information you will receive from us as "supplier of an article" in accordance with the requirements of REACH.

## Information requirements according to Article 33

The following article is supplied by us to you / the following articles are supplied by us to you¹:

Cold rolled steel strip, QT

According to Article 33(1) REACH, any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0,1 %weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

If such cases occur we will properly comply with the information requirements in order to ensure the safe handling of our high quality articles. We are in close contact with our suppliers and have never received any information on SVHC in articles. On the basis of our risk assessment there are no indications which will lead to a specific sample analysis up to now. According to the information available we currently assume that our articles do not

Art. 3 no. 3 REACH: article: means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition



Komplementär: Köhler Verwaltungs-GmbH, 59199 Bönen, Amtsgericht Hamm HRB 6880 Christian Köhler, Reif Schamp Kommanditgesellschaft, Sitz: 59199 Bönen, Amtsgericht Hamm HRA 3560

Wir sind zertifiziert nach: ISO/TS 16949:2009 ISO 9001:2008



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STAHLWERK UNNA GmbH & Co. KG - Edisonstr. 27 - 59199 Bönen

contain any SVHC in a concentration above 0,1 % weight by weight (w/w). Once we have further information we will inform you immediately and coordinate appropriate measures. Due to our broad range of articles and due to the fact that we are depending on the information coming from our suppliers, who also have to fulfil the information requirements, you will certainly understand that we are not able to give further legally binding statements.

## **REACH implementation in our company**

The expert group "Environment and occupational safety" of WSM Wirtschaftsverband Stahl- und Metallverarbeitung e.V. - we are involved in the expert group via our cold rolling industry association - regularly informs us about proposed substances for the Candidate List, public consultations, new SVHC on the Candidate List<sup>2</sup> with currently 173 substances (last updated on 12 January 2017) and about the relevance of SVHC. The published information on uses of SVHC show that the products supplied do not contain any of these substances<sup>3</sup>.

By sending you this information letter to fulfil our information requirements as a "supplier of an article" according to Article 33(1) REACH we are following legal provisions, recommendations of WSM Wirtschaftsverband Stahl- und Metallverarbeitung e.V. and our cold rolling industry association.

This statement applies only to the article / articles supplied by us. Modifications of the article / articles within the processing are thereby not covered.

For any further questions do not hesitate to contact us.

Kind regards,

Stahlwerk Unna SmbH & Co. KG

ppa. Sylvia Horn

Sales manager strip steel

http://www.reach-clp-biozid-helpdesk.de/de/REACH/Kandidatenliste/Kandidatenliste-Verwendung/Kandidatenliste-Verwendung.html and http://echa.europa.eu/web/guest/information-on-chemicals/candidate-list-substances-in-articlestable.



Komplementär: Köhler Verwaltungs-GmbH, 59199 Bönen, Amtsgericht Hamm HRB 6880 Geschäftsführer: Christian Köhler, Ralf Schamp Rechtsform: Kommanditgesellschaft, Sitz: 59199 Bönen, Amtsgericht Hamm HRA 3560

Wir sind zertifiziert nach: ISO/TS 16949:2009 ISO 9001:2008

<sup>&</sup>lt;sup>2</sup> http://echa.europa.eu/candidate-list-table and http://www.reach-clp-biozidhelpdesk.de/de/REACH/Kandidatenliste/Kandidatenliste.html

Atlantic Service Co, (UK) Ltd Willow Road, Pen-y-fan Ind. Est. Croespenmaen, Crumlin NP11 4EG NEWPORT GB voestalpine Precision Strip GmbH Waidhofnerstrasse 3 3333 Boehlerwerk AUSTRIA

Legal form: GmbH Headquarters: Boehlerwerk/Austria FN 90913 x at the Commercial Court St. Poelten DVR 0563161 UID-No. ATU 36929204

Your ref
Your letter of
Our ref
Telefon/Pex
E-Mell: christian.peterlechner@voestelpine.com
Place/Oste: Böhlerwerk, 11.11.2019
Pege: 1/3

#### STATEMENT OF COMPLIANCE

with the restrictions to the use of Harmful Substances controlled by Directive 2011/65/EU (RoHS II) and subsequent amendments (RoHS III – Directive 2015/863).

Dear customer.

You can be sure that voestalpine Precision Strip GmbH take care that our production and products are in accordance with the EU Directives 2015/863/EC (RoHS III), 2011/65/EC (recasted RoHS II-Directive) and 2003/11/EC relating to the restriction of use of certain regulated hazardous substances in electrical and electronic equipment.

Table 1: Substances forbidden by RoHS Directive

Substance	Maximum Concentration Values		
Lead and its compounds	0.1% w/w on homogenous material*	–(1g/Kg – 1000 ppm)	
Mercury and its compounds	0.1% w/w in homogenous material*	-(1g/Kg 1000 ppm)	
Cadmium and its compounds	0.01% w/w in homogenous material*	100mg/Kg - 100 ppm)	
Hexavalent Cromium and its compounds	0.1% w/w in homogenous material*	(1g/Kg - 1000 ppm)	
PBB (Polybrominated Biphenyl)	0.1% w/w in homogenous material*	(1g/Kg - 1000 ppm)	
PBDE (Polybrominated Diphenyl Ether)**	0.1% w/w in homogenous material*	(1g/Kg – 1000 ppm)	
DEHP (Bis(2-Ethylhexyl) phthalate)	0.1% w/w in homogenous material*	(1g/Kg - 1000 ppm)	
BBP (Benzyi butyi phthalate)	0.1% w/w in homogenous material*	(1g/Kg - 1000 ppm)	
DBP (Dibutyl phthalate)	0.1% w/w in homogenous material*	(1g/Kg – 1000 ppm)	
DIBP (Diisobutyl phthalate)	0.1% w/w in homogenous material*	(1g/Kg – 1000 ppm)	



Our ref Date Page 2/3

voestalpine Precision Strip GmbH is certified in accordance with EN ISO 14001

Our company obliges the suppliers to comply our code of conduct. Our code of conduct was introduced in 2009 and is based on the ethlical values of our company. By the code of conduct voestalpine Precision Strip GmbH challenges the suppliers to absolute legal compliance depending on the local legislation as well as to obey international edicts or such imposed by the EC.

We hope that our information will sufficiently answer your questions. If you need more details, don't hesitate to contact us.

Yours sincerely,



## EU DECLARATION OF CONFORMITY according to ANNEX VI of the directive 2011/65/EC

- 1. No (unique identification of the EEE): 2015/863, 2011/65EC (recasted RoHS-Directive) and 2003/11/EC.
- 2. Name and address of the manufacturer or his authorised representative:
- voestalpine Precision Strip GmbH, Waidhofnerstraße 3, 3333 Böhlerwerk, Austria
- 3. VAT number (for European companies only): VAT Nr. ATU 36929204
- 4. This declaration of conformity is issued under the sole responsibility of the manufacturer:
- voestalpine Precision Strip GmbH, Waidhofnerstraße 3, 3333 Böhlerwerk, Austria
- 5. Object of the declaration (identification of EEE allowing traceability. It may include a photograph, where appropriate):

Butcher band saw steel in UHB 20C for all deliveries to

Atlantic Service Co, (UK) Ltd Willow Road, Pen-y-fan Ind. Est. Croespenmaen, Crumlin NP11 4EG NEWPORT, GB

- 6. The object of the declaration described above is in conformity with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment as referred in Article 4 (1) and defined in Annex II of the 2011/65EC (recasted RoHS-Directive) and 2003/11/EC.
- 7. Where applicable, references to the relevant harmonised standards used or references to the technical specifications in relation to which conformity is declared: according to the material specifications
- 8. Additional information: not applicable.

Signed for and on behalf of:

- voestalpine Precision Strip GmbH, Waidhofnerstraße 3, 3333 Böhlerwerk, Austria

Place and date of issue: Böhlerwerk, 11.11.2019

D.I. Baxelmüller Manfredt

voestalpine

ONE STEP AHEAD.



POSCO Code Number: 029

## **Material Safety Data Sheet**

[This sheet was made by Industrial Safety and Health Act, Article 41, in Koreal

Original Issue Date: 01/01/13

## Section 1 - Chemical Product and Company Identification

Product/Chemical Name: 400 series Stainless Steel

Common Name: Stainless Steel

Manufacturer: 5 Dongchon-dong, Nam-gu, Pohang-si, Gyeongsangbuk-do 790-360, Korea

General Information: 82-54-220-0114, 82-54-220-6000 Off-Hour Emergency Phone Number: 82-54-220-7021, 7046

## Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	Percentage by wt.	OSHA PEL <sup>1</sup>	ACGIH TLV <sup>2</sup>
Fe (Iron)	7439-89-6	Balance	10 mg/m³ - Iron oxide fume	5 mg/m³ - Iron oxide dust and fume
C (Carbon)	7440-44-0	0~ 0.02%	15 mg/m³ -Total dust (PNOR) ³ 5 mg/m³ - Respirable fraction (PNOR)	10 mg/m³ - Inhalable fraction <sup>4</sup> (PNOS) <sup>5</sup> 3 mg/m³ - Respirable fraction <sup>6</sup> (PNOS)
Si (Silicon)	7440-21-3	0.3~0.7%	15 mg/m³ - Total dust 5 mg/m³ - Respirable fraction	10 mg/m³
Mn (Manganese)	7439-96-5	0~0.5%	5 mg/m³ (C) - Fume & Mn compounds	0.2 mg/m³
P (Phosphorus)	7723-14-0	0~0.35%	0.1 mg/ m <sup>3</sup>	0.01 mg/ m³
S (Sulfur)	7704-34-9	0~0.01%.	15 mg/m³ - Total dust (PNOR) 5 mg/m³ - Respirable fraction (PNOR)	10 mg/m³ - Inhalable fraction (PNOS) 3 mg/m³ - Respirable fraction (PNOS)
Ti (Titanium)	7440-32-6	0.1~0.3%	15 mg/m³ - Total dust (PNOR) 5 mg/m³ - Respirable fraction (PNOR)	10 mg/m³ (Titanium dioxide)
Cr (Chromium)	7440-47-3	11.0~11.6%	1 mg/m³ - Chromium metal	0.5 mg/m³ - Cr metal & Cr III compounds
Ni (Nickel)	7440-02-0	0~0.3%	1 mg/m³ - Metal & insol. compounds (as Ni)	1.5 mg/m³ - Elemental nickel (as Ni) 0.2 mg/m³ - Insoluble compounds (NOS) <sup>7</sup>
Cu (Copper)	7440-50-8	0~0.5%	. 0.1 mg/m³ - Fume (as Cu) 1 mg/m³ - Dusts & mists (as Cu)	0.2 mg/ m <sup>3</sup> - Fume t mg/ m <sup>3</sup> - Dusts & mists (as Cu)

<sup>\*</sup> All commercial steel products may contain small amounts of various elements in addition to those specified. These small quantities (less than 0.1%) may exist as intentional additions, or as "trace" or "residual" elements that generally originate in the raw materials used. These elements may include: aluminum, antimony, arsenic, boron, cadmium, calcium, cobalt, columbium, lead, molybdenum, tin, vanadium, and zirconium.

<sup>2</sup> Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted.

<sup>3</sup> PNOP (Particulates No. Cont.)

<sup>4</sup> Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH TLVs and BEIs Appendix D, paragraph A.

5 PNOS (Paradia 1 to 2016)

<sup>&</sup>lt;sup>1</sup> OSHA Permissible Exposure Limits (PELs) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A ("C") designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday.

<sup>&</sup>lt;sup>3</sup> PNOR (Particulates Not Otherwise Regulated). All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by the PNOR limit which is the same as the inert or nuisance dust limit of 15 mg/m<sup>3</sup> for total dust and 5 mg/m<sup>3</sup> for the respirable fraction.

<sup>&</sup>lt;sup>5</sup> PNOS (Particulates Not Otherwise Specified). Particulates identified under the PNOS heading are "nuisance dusts" containing no asbestos and <1% crystalline silica. A TWA-TLV of 10 mg/m³ for inhalable particulate and 3 mg/m³ for respirable particulate has been recommended.



Respirable fraction. The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH TLVs and BEIs Appendix D, paragraph C. 7NOS. Not otherwise specified.

#### Section 3 - Hazards Identification

### **Emergency Overview**

This formed solid metal product poses little or no immediate health or fire hazard. When product is subjected to welding, burning, grinding, melting, sawing, brazing, or other similar machining activities, potentially hazardous airborne particulate and fumes may be generated and should be evaluated by an industrial hygienist. Avoid inhalation of metal dusts and fumes. Operations having the potential to generate airborne particulates should be performed in well ventilated areas and, if it is impossible, respiratory protection and other personal protective equipment should be used. The presence of nonmetallic coatings (for example, oils, paints, epoxies, laminates, etc.) on steel products should be considered when evaluating potential employee health hazards during handling, welding, grinding, sanding or other fume/dust generating activities.

#### **Potential Health Effects**

**Primary Entry Routes:** Inhalation. Steel products in the natural state do not present an inhalation, ingestion or contact hazard. However, operations such as burning, welding, sawing, brazing, machining and grinding may result in the following effects if exposures exceed recommended limits as listed in Section 2. **Target Organs:** Respiratory system

#### **Acute Effects:**

- . Inhalation: Excessive exposure to high concentrations of dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract. Excessive inhalation of fumes of freshly formed metal oxide particles sized below 1.5 microns and usually between 0.02-0.05 microns from many metals can produce an acute reaction known as "metal fume fever". Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms), metallic taste in the mouth, dryness and irritation of the throat followed by weakness and muscle pain. The symptoms come on in a few hours after excessive exposures and usually last from 12 to 48 hours. Long-term effects from metal fume fever have not been noted. Freshly formed oxide fumes of manganese and copper have been associated with causing metal fume fever.
- . Eye: Excessive exposure to high concentrations of dust may cause irritation to the eyes. Particles of iron or iron compounds, which become imbedded in the eye, may cause rust stains unless removed fairly promptly. Torching or burning operations on steel products with oil coatings may produce emissions that can be irritating to the eyes.
- . Skin: Skin contact with dusts may cause irritation or sensitization, possibly leading to dermatitis. Repeated or prolonged contact with oil residue may cause skin irritation, dermatitis or allergic reactions in sensitized individuals.
- . **Ingestion:** Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of dust may cause nausea or vomiting.

#### **Chronic Effects:**

Presented below are the potential health effects that have been identified for the ingredients listed that are of industrial hygiene significance.

- . **IRON OXIDE**: Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign lung conditions known as pneumoconiosis, called siderosis, which is observable as an X-ray change. But, no physical impairment of lung function has been associated with siderosis.
- . CARBON: Chronic inhalation of high concentrations to carbon may cause pulmonary disorders.
- . CHROMIUM: The health hazards associated with exposure to chromium are dependent upon its oxidation state. The metal form (chromium as it exists in this product) is of relatively low toxicity. Long term excessive inhalation of ferrochromium dusts and fumes may cause lung changes in exposed workers. Exposure to chromium metal does not give rise to pulmonary fibrosis or pneumoconiosis. The hexavalent form (Cr<sup>+6</sup>), unlike chromium metal is very toxic. Repeated or prolonged exposure to hexavalent chromium compounds may cause respiratory irritation, nosebleed, ulceration and perforation of the nasal septum. Industrial exposure to certain forms of hexavalent chromium has been related to an increased incidence of



respiratory cancer.

- . COPPER: Chronic exposure to copper dusts may result in runny nose, irritation of mucous membranes, and atrophic changes with resultant dementia. Chronic inhalation of copper dust has caused, in animals, hemolysis of the red blood cells, deposition of hemofuscin in the liver and pancreas, injury to lung cells and gastrointestinal symptoms.
- . MANGANESE: Manganese dust and fume can act as minor irritants to the eyes and respiratory tract. Excessive inhalation exposure to manganese fume may result in a flu-like illness termed metal fume fever. Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system (CNS) with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections.
- . NICKEL: Exposure to nickel dusts and fumes can cause allergic dermatitis, respiratory irritation, asthma, pulmonary fibrosis, eye irritant, edema and may cause nasal or lung cancer in humans. Respiratory cancer risks primarily relate to chronic exposure to soluble nickels at concentrations in excess of 1 mg Ni/m³ and exposure to the less soluble forms at concentrations greater than 10 mg Ni/m³. Metallic nickel does not appear to pose such a threat.
- . PHOSPHOROUS: Inhalation of dusts and fumes of ferrophosphorus and phosphorous oxides may cause respiratory irritation.
- . SILICON: Silicon dusts are a low health risk by inhalation and should be treated as a nuisance dust.
- . SULFUR: Sulfur compounds, present in the fumes, may irritate the skin, eyes, lungs and gastrointestinal tract. Long-term inhalation exposure to high concentrations (over-exposure) to pneumoconiotic agents may act synergistically with inhalation of oxides, fumes or dusts of this product to cause toxic effects.
- . TITANIUM: There is no evidence of a health hazard from inhalation of titanium dioxide at airborne concentrations below 10 mg/m³. The toxicity of titanium dioxide has been found to be relatively inert.

Carcinogenicity: The International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), and OSHA do not list steel products as carcinogens. IARC identifies nickel compounds as Group 1 (sufficient evidence for carcinogenicity in humans) and metallic nickel as Group 2B (possibly carcinogenic for humans). NTP lists nickel as Group 2 (reasonably anticipated to be a human carcinogen). The American Conference of Governmental Industrial Hygienists (ACGIH) lists insoluble nickel compounds as A1 (confirmed human carcinogen) and elemental/metallic nickel as A5 (not suspected as a human carcinogen). IARC lists chromium metal and trivalent chromium compounds as Group 3 (not classifiable as to their human carcinogenicity). ACGIH lists chromium metal and trivalent compounds as A4 (not classifiable as a human carcinogen). IARC identifies welding fumes as a Group 2B carcinogen, a mixture that is possibly carcinogenic to fumans.

Medical Conditions Aggravated by Long-Term Exposure: Individuals with chronic respiratory disorders (i.e., asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any fume or airborne particulate matter exposure.

#### Section 4 - First Aid Measures

**Inhalation:** For over-exposure to airborne fumes and particulate, remove exposed person to fresh air. If breathing is difficult or has stopped, administer artificial respiration or oxygen as indicated. Seek medical attention promptly. Metal fume fever may be treated by bed rest, and administering a pain and fever reducing medication.

**Eye Contact:** Treat for foreign body in the eye. Flush with large amounts of clean water to remove particles. Seek medical attention if irritation persists.

Skin Contact: Not anticipated to pose a significant skin hazard. However, should dermatitis develop, wash affected area thoroughly with mild soap and water. If irritation or other symptoms develop, seek medical attention. Remove contaminated clothing. If thermal burn has occurred, flush area with cold water and seek medical attention. If mechanical abrasion has occurred, seek medical attention.

**Ingestion:** Not considered an ingestion hazard.

## Section 5 - Fire-Fighting Measures

## posco

Steel products do not present fire or explosion hazards under normal conditions. But, molten metal may react violently with water. High concentrations of metallic fines in the air may present an explosion hazard. Fire fighters are to wear full protective equipment, including full bunker gear and SCBA respiratory protection.

Flash Point	Not applicable	
LEL	Not applicable	
UEL	Not applicable	
Flash Point Method	Not applicable	
Flammability Classification	Non-flammable, non-combustible	
Unusual Fire or Explosion Hazards		
Hazardous Combustion Products	At temperatures above the melting point, fumes containing metal oxides and other alloying elements may be liberated.	

## Section 6 - Accidental Release Measures

Any excess product can be recycled for further use, disposed in an appropriately permitted waste landfill, or disposed by other methods in accordance with local, state, and federal regulations. Finely divided, dry particles should be removed by vacuuming or wet sweeping to prevent spreading dusts. Avoid using compressed air.

Spill/Leak Procedures: Not applicable to steel in solid state. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. Do not release into sewers or waterways.

Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

### Section 7 - Handling and Storage

Handling Precautions: Operations with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Practice good housekeeping. Avoid breathing metal fumes and/or dust.

Storage Requirements: Store away from acids and incompatible materials.

## Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Use lifting and work devices, e.g., crane, hoist, etc., within rated capacities and in accordance with manufacturer's instructions when handling these products.

- (1) avoid breathing dust and fume
- (2) evaluate potential employee exposure
- (3) minimize generation of airborne emissions
- (4) maintain surfaces free as practical of accumulated material
- (5) use protective clothing as specified by an industrial hygienist or safety professional where exposure levels may be excessive
- (6) do not smoke in work area
- (7) wash hands before eating, drinking or smoking and after handling,
- (8) change contaminated clothing before leaving work premises.



Pennsylvania Right to Know: Contains regulated material in the following categories:

. Hazardous Substances: Calcium, Silicon and Sulfur.

. Environmental Hazards: Aluminum, Copper and Manganese.

New Jersey Right to Know: Contains regulated material in the following categories:

. Hazardous Substance: Aluminum (dust and fume), Copper, Manganese and Sulfur.

. Special Health Hazard Substances: Calcium.

California Prop. 65: The product may possibly contain trace quantities (generally much less than 0.1%) of metallic elements known to the State of California to cause cancer or reproductive toxicity. These include arsenic (inorganic), cadmium, lead and nickel.

Other Regulations: The product as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations.

## **Section 16 - Other Information**

Prepared By: POSCO

Disclaimer: All information, recommendations, and suggestions appearing herein concerning this product are taken from sources or based upon data believed to be reliable. Although reasonable care has been taken in the preparation of this information, POSCO EXTENDS NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, MAKES NO REPRESENTATIONS, AND ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY, RELIABILITY OR COMPLETENESS OF THE INFORMATION PRESENTED. Since the actual use of the product described herein is beyond our control, POSCO assumes no liability arising out of the use of the product by others. It is the user's responsibility to determine the suitability of the information presented herein, to assess the safety and toxicity of the product under their own conditions of use, and to comply with all applicable laws and regulations. Appropriate warnings and safe handling procedures should be provided to handlers and users.

## 400 series Stainless Steel

#### Contains:

Carbon (CAS 7440-44-0), Chromium (CAS 7440-47-3), Copper (CAS 7440-50-8), Iron (CAS 7439-89-6), Manganese (CAS 7439-96-5), Phosphorus (CAS 8049-19-2), Sulfur (CAS 7704-34-9), Nickel (7440-020), Silicon (CAS 7440-21-3), and Titanium (CAS 7440-32-6)

## **CAUTION**

Hazards: Long-term excessive exposure to the fume or dust during welding, burning, cutting, grinding and machining activities may cause respiratory system effects. This product may coated with materials that could result in skin irritation with prolonged contact. Studies have associated nickel and certain nickel compounds to an increased risk of cancer of the respiratory system.

## Recommended Handling Procedures:

- · Avoid creating and breathing or ingesting excessive dust or fume levels. Adequate mechanical ventilation or personal protective equipment during welding, burning, melting, cutting, brazing, grinding and machining (i.e., eye protection, protective clothing and NIOSH-approved respiratory protection) may be necessary during welding, burning, grinding and other dust/fume generating activities.
- The presence of nonmetallic coatings (for example, oils, paints, epoxies, laminates, etc.) on these products should be considered when evaluating potential employee health hazards. Removal of surface coatings should be considered prior to welding or other dust/fume generating activities. Avoid prolonged skin contact with nonmetallic coating oils.

## FIRST AID AND MEDICAL EMERGENCY PROCEDURES

Eye Contact: Treat for foreign body in the eye. Seek medical attention.

Skin Contact: Not anticipated to pose a significant skin hazard. However, should dermatitis develop, wash affected area with mild soap and warm water. Seek medical attention if conditions persist.

Inhalation: Remove from excessive exposure levels. Seek medical attention. Give artificial respiration if breathing has stopped.

Ingestion: Not considered an ingestion hazard.

## Oct 1, 2003

For more detailed health and safety information, read the Material Safety Data Sheet (MSDS) for this

: 5 Dongchon-dong, Nam-gu, Pohang-si, Gyeongsangbuk-do 790-360, Korea

General Information: 82-54-220-0114, 82-54-220-6000 Off-Hour Emergency Phone Number: 82-54-220-7021, 7046

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## LIBERTY Liberty Performance Steel. Performance Trident Steelworks, Albion Road, West Bromwich, B70 8BH.

## **Certificate of compliance**

Maximum concentration values by weight of homogeneous material

Lead – Pb	
	0.1%
Mercury - Hg	0.1%
Cadmium – Cd	0.01%
Hexavalent Chromium – Cr (VI)	
Polybrominated Biphenyls - PBB	0.1%
Dalahari Andrew Diprientyis - PBB	0.1%
Polybrominated Diphenyl Ethers – PBDE	0.1%

- (we) hereby certify that the content of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls - PBB or polybrominated diphenyl Ethers - PBDE in the metals and materials supplied, do not exceed the maximum concentration levels as per the table above.
- o I (we) hereby certify that the content of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls - PBB or polybrominated diphenyl Ethers - PBDE in the metals and materials supplied, exceed the maximum concentration levels as per the table above. Therefore I (we) offer the attached discloser regarding specific concentration levels for those components in excess of the maximum allowable value.

Suppliers are asked to disclose accurate information and identify specific concentration levels of these substances, either as Raw Material (Impurity) or Process Material (Internationally Added), that are in excess of maximum concentration values detailed above.

(Suppliers may use the attached declaration or supply their own documentation detailing this information)

o I (we) can not certify that the metals and material supplied, do not exceed the maximum concentration levels as tabled above, nor can I (we) offer accurate discloser regarding the actual concentration levels of these substances.

Explain: From calculated usage values of lead/bismuth alloy consumed per tonne of material produced, the average lead content is below the required limit of 1000 P.P.M. To our knowledge no other Rohs products are contained within the steel provided.

Authorised Representative: C.D.JUKES

Signature:

Title:

**TECHNICAL AND SALES DIRECTOR** 

Date:

18/11/2019

## Section 12 - Ecological Information

Steel products in their usual form do not pose an ecological hazard.

**Ecotoxicity:** No data available for the product as a whole. However, individual components of the product have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife.

Environmental Fate: No data available.

Environmental Degradation: No data available.

**Soil Absorption/Mobility:** No data available for the product as a whole. However, individual components of the product have been found to be absorbed by plants from soil.

### **Section 13 - Disposal Considerations**

Any excess product can be recycled for further use, disposed in an appropriately permitted waste landfill, or disposed by other methods in accordance with local, state, and federal regulations.

**Disposal:** Steel scrap should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations.

Container Cleaning and Disposal: Follow applicable Federal, state and local regulations. Observe safe handling precautions.

## **Section 14 - Transport Information**

Not a hazardous material for DOT shipping.

## Section 15 - Regulatory Information

Regulatory Information: The following listing of regulations relating to a POSCO product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities. This product and/or its constituents are subject to the following regulations. And those followings are described (listed) by counting of first importance to USA.

#### Regulations in Korea:

Individual components of the product are regulated under Industrial Safety And Health Act, Toxic Chemicals Control Act and Fire Services Act.

#### **OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): The product as a whole is not listed. However, individual components of the product are listed.

#### **EPA Regulations:**

RCRA(40CFR261): Steel scrap is not regulated as a solid waste or a hazardous waste under this act. If product dusts and/or fumes from processing operations are not recycled, they are considered to be a solid waste and may be classified as a hazardous waste depending on the toxicity characteristics of the dust as defined within 40CFR261.24.

CERCLA Hazardous Substance (40 CFR 302.4): The product as a whole is not listed. However, individual components of the product are listed: Copper (Reportable Quantity (RQ)-5000#). Manganese compounds are also listed although no reportable quantity is assigned to this generic or broad class.

SARA 311/312 Codes (40CFR370): Immediate (acute) health hazard and delayed (chronic) health hazard. SARA 313(40CFR372.65): Manganese is subject to SARA 313 reporting requirements. Please note that if you prepackage or redistribute this product to industrial customers, SARA 313 requires that a notice be sent to those customers.

State Regulations in USA: The product as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations.



**Ventilation:** Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: Do not use compressed air to clean-up spills.

**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen.

**Skin and eye protection:** For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, gloves and safety glasses to prevent skin and eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations. Protective gloves should be worn as required for welding, burning or handling operations.

Section 9 - Physical and Chemical Properties

Physical State	Solid	Water Solubility	Insoluble
Appearance and Odor	Metallic Gray, Odorless	Boiling Point	Not applicable
Vapor Pressure	Not applicable	Evaporation Rate	Not applicable
Vapor Density (Air=1)	Not applicable	Freezing/Melting Point	~2750 °F
Specific Gravity (H <sub>2</sub> O=1, at 4 °C)	7.85	рН	Not applicable

## Section 10 - Stability and Reactivity

Stability: Steel products are stable under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.

Conditions to Avoid: Storage with strong acids or calcium hypochlorite.

Hazardous Decomposition Products: Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

## Section 11 - Toxicological Information

No information is available for the product as a mixture.

Eye Effects: Eye contact with the individual components may cause particulate irritation. Implantation of iron particles in guinea pig corneas have resulted in rust rings with corneal softening about rust ring.

Skin Effects: Skin contact with the individual dust components may cause physical abrasion, irritation, dermatitis, and sensitization.

Acute Inhalation Effects: Inhalation of the individual alloy components has been shown to cause various respiratory effects.

Acute Oral Effects: No data available

Other: No LC50 or LD50 has been established for the mixture as a whole.

Iron LD50: 30 g/kg oral (rat). Aluminum LD50: No data. Boron LD50: 2000 mg/kg oral (mouse). Calcium LD50: No data. Carbon LD50: No data. Copper TDLo: 120 ug/kg oral (human). Manganese LD50: 9 g/kg oral (rat). Phosphorous LD50: No data. Silicon LD50: 3160 mg/kg oral (rat). Sulfur LD50: >8437 mg/kg oral (rat).

Chronic Effects, Carcinogenicity: See Section 3.

Mutagenicity, Teratogenicity: No data

available