Delivering Innovative Metal Solutions

Material Safety Data Sheet—

Chromium Nickel alloyed Stainless Steel

1.0			**Identification of Product and Company**
1.1	Product	:	Chromium Alloyed Stainless Steel
1.2	Supplier	:	BS Stainless Limited 360 Leach Place Walton Summit Preston PR5 8AS
1.3	Emergency Contact	:	P: +44 (0) 1772 337555 ; E: info@bsstainless.co.uk
1.4	Date Updated		January 20, 2015
2.0			**Hazards Identification**
2.1	Emergency Overview	:	These products are not hazardous unless processed (i.e. ground, welded) in a manner that generates dust or fumes. Just and fumes may cause eye, skin and respiratory irritation. May cause skin and respiratory tract sensitization (allergic reaction). Prolonged inhalation of dust or fumes from this product may cause perforation of the nasal septum and lung damage. This product contains nickel which may cause cancer.
3.0			**Composition and Ingredients**

Chemical Name	CAS - No.	Weight %
Iron	7439-89-6	Balance
Chromium	7440-47-3	10.5 - 26
Molybdenum	7439-98-7	0-6.5
Manganese	7439-96-5	0-2
Silicon	7440-21-3	0-1.0
Nickel	7440-02-0	2.5-26
Copper	7440-50-8	0-1
Cobalt	7440-48-4	0-0.6

4.0			**First Aid Measures**
4.1	Inhalation	:	Not applicable in solid form. Inhalation of dust or fume from grinding, cutting and welding operations is unlikely to generate the need for specific first aid.
4.2	Skin or Eye Contact	:	There are no special symptoms or effects associated with stainless steel. In the event of physical injury to the skin seek appropriate medical attention. In the event of physical injury to the eyes, seek immediate medical attention. Austenitic stainless steel particles are non-magnetic or only slightly magnetic and may not respond to a magnet placed over the eye. In such cases seek hospital treatment.
4.3	Ingestion	:	Does not apply to stainless steel in the solid form.

5.0			**Fire Fighting Procedures**
5.1	Extinguishing Media	:	This material is not combustible in solid form. Use media that is appropriate for the surrounding fire. For fires involving fine dust or filings, do not use water, CO2 or foam directly on the burning metal. Use dry sand, graphite powder, Lith-X powder, dry chemical or other media appropriate for a class D fire.
5.2	Fire Fighting Procedures	:	Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.
6.0			**Accidental Release Measures**
	Not Applicable		
7.0			**Handling and Storage**
7.1	Handling	:	Do not breathe dust or fumes from processing. Avoid contact with dust. Wear protective clothing and equipment as described in Section 8. Process only with adequate ventilation. Keep containers closed when not in use. Do not eat, drink or smoke in the work area.
7.2	Storage	:	Store in a cool, well ventilated location away from incompatible materials.
8.0			**Exposure Controls/Personal Protection**
8.1	Engineering Controls	:	None needed under normal use. If dust or fumes are generated during processing, use with adequate local exhaust ventilation to maintain exposures below D20 the occupational exposure limits.
8.2	Eye Protection	:	Wear safety glasses or other eye protection consistent with industrial safety practice for the process being performed.
8.3	Skin Protection	:	Wear protective gloves if need to prevent cuts or other injuries.
8.4	Respiratory Protection	:	None needed under normal use. If the occupational exposure limits are exceeded during processing, an approved respirator with high efficiency particulate filters may be used. For higher exposures (greater than 10 times the exposure limit) a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 or local authority regulations and good Industrial Hygiene practice.
9.0			**Physical and Chemical Properties**
9.1	Physical State	:	Solid
9.2	Odour	:	Odourless
9.3	Density	:	7.7—8.3 g/cm^3
9.4	Melting Point	:	1325 to 1530 ^{0}C
9.5	Water Solubility	:	1325 to 1530 ^{0}C
9.6	Specific Gravity	:	0.27 - 0.30

10.0	**Stability and Reactivity**	
10.1 Stability	:	Stable
10.2 Conditions to avoid	:	None Known
10.3 Incompatibility	:	Acids, Oxidising agents, ammonia nitrate, Sulfur, alkalis, Selenium, nickel nitrate and sodium azide
10.4 Hazardous Decomposition	:	Toxic metal fumes and oxides are emitted when product is heated above the melting point
11.0	**Toxicological Information**	
Stainless Steel is non toxic		
12.0	**Ecological information**	
No known harmful effects. No special precautions are required.		
13.0	**Disposal Considerations**	
Surplus and scrap (waste) stainless steel is valuable and in demand for the production of prime new stainless steel. Recycling routes are well-established, and recycling is therefore the preferred disposal route. Disposal to landfill is not harmful to the environment, but it is a waste of resources and therefore less desirable than recycling.		
14.0	**Transport Information**	
No special precautions required – non-hazardous for road, sea or air.		
15.0	**Health, Safety and Environmental Regulatory Information**	
15.1 CE Marking	:	Supplied to CPR 305/2011 and BS EN 10088 - 4/5
15.2 REACH	:	Stainless Steel does not contain any **S**ubstance of **V**ery **H**igh **C**oncern (SVHC) in their products exceeding 0.1% by weight, in - line with Article 33(1) of REACH regulation
16.0	**Other Information**	
Information supplied is in line with EN 10088 and British Stainless Steel Association (BSSA). Updated 20/01/2015.		
16.1 HMIS Hazard Rating	:	Health - 0 Fire Hazard - 0 Physical Hazard - 0
16.2 EU Preparation Classification	:	Xn (Harmful); R40, R42, R48/23, R53
Disclaimer	:	The information given in the safety datasheet is based on the present level of our knowledge and experience. The data sheet describes the products with respect to safety requirements. The data given is not intended as a confirmation of product properties and does not constitute a legal contractual relationship, nor should it be used as the basis for ordering these products.