



O.R.I. MARTIN
ACCIAIERIA E FERRIERA
DI BRESCIA S.P.A.

MATERIAL SAFETY DATA SHEET

BILLETS IN REINFORCING STEEL

Conforms to EC Regulation 1272/2008 and EU Regulation 453/2010

Revision nr 1
Dated 5th march 2012
Page 1 di 7

1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	
	Product name	Steel billets for reinforced concrete
	Registration number	Not necessary. ORI Martin S.p.A. is a secondary producer of steel, because it recover substances from scrap metal. It benefits from the exemption in Article 2.7 (d) of EC Regulation 1907/2006 "REACH".
1.2.	Relevant identified uses of the substance or mixture and uses advised against	
	Intended use	Steel billets for reinforced concrete
1.3	Details of the supplier of the safety data sheet	
	Name	ORI MARTIN SPA
	Full address, district and country	Via Cosimo Canovetti, 13 25128 BRESCIA
	Telephone number	+39 030 39991
	Fax number	+39 030 2000924
	e-mail address of the competent person responsible for the Safety Data Sheet	info@orimartin.it
1.4	Emergency telephone number	ORI MARTIN SPA Telephone exchange: +39 030 39991 (H24)
2	Hazards identification	
	Physical/chemical hazards	None.
	Human health hazards	Under normal conditions, steel in solid form does not present any danger. Hazardous substances in the alloy are linked with metallic bonds. No episodes of toxic effects have been reported for solid form, both during supply and normal use of the product. The possible formation of vapors or dust during working processes of the material may increase the risk of inhalation and skin contact with hazardous substances. Some substances are known to be toxic and carcinogenic in humans beings, but in a different form than the metallic bond.
	Environmental hazards	None.
2.1	Classification of the substance or mixture	
	The product is not classified as hazardous pursuant to the provisions set forth in 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments and EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). However, cause the product contains dangerous substances in such concentration to be declared in section 3, it thus requires a safety data sheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.	
2.1.1	Regulation 1272/2008 (CLP) and following amendments and adjustments	
	Not applied.	
2.1.2	67/548/EEC and 1999/45/EC Directives and following amendments and adjustments	
	Danger Symbols	-
	R phrases	-
	The full wording of the Risk (R) phrases is given in section 16 of the sheet.	
2.2	Label elements	
	This product is not subject to hazard labeling pursuant to 67/548/EEC and 1999/45/EC Directives and	



O.R.I. MARTIN
ACCIAIERIA E FERRIERA
DI BRESCIA S.P.A.

MATERIAL SAFETY DATA SHEET

BILLETS IN REINFORCING STEEL

Conforms to EC Regulation 1272/2008 and EU Regulation 453/2010

Revision nr 1
Dated 5th march 2012
Page 2 di 7

	following amendments and adjustments.			
	Hazard pictograms		-	
	R phrases		-	
	S phrases		-	
2.3	Altri pericoli		Information not available.	
3	Composition/information on ingredients			
3.1	Substances		Information not relevant.	
3.2	Mixtures			
	Contains:			
	Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
	Alloy steel containing hazardous substances with metallic bonds	Iron (Fe): min 95.59% Carbon (C): 0.15 / 0.24 % Sulfur (S): max 0.055 % Phosphorus (P): max 0.055 % Manganese (Mn): 0.50 / 1,40 % Copper (Cu): max 0.85 % Silica (Si): max 0.50 % Chromium (Cr): max 0.50 % Nickel (Ni): max 0.50% Molybdenum (Mo): max 0.15 % Aluminum (Al): max 0.020 % Vanadium (V): max 0,07 % Niobium (Nb): max 0,055 % Nitrogen (N): max 0.013 %	/	/
	The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.			
4	First aid measures			
4.1	Description of first aid measures			
	No episodes of harm to the staff authorised to use the product have been reported. However, in the presence of dust or fumes due to metal working, the following general measures should be adopted as necessary:			
	Eyes	Wash with plenty of water (held eyelids open and remove contact lenses). If symptoms persist, seek medical advice.		
	Skin	Wash affected areas with soap and water. Remove contaminated clothing. If symptoms persist, get medical advice/attention.		
	Inhalation	Inhalation of dust or fumes: remove subject to open air. Blow your nose repeatedly. If symptoms persist, get medical advice/attention.		
	Ingestion	Rinse mouth with water. If symptoms persist, get medical advice/attention.		
4.2	Most important symptoms and effects, both acute and delayed		For symptoms and effects caused by the contained substances, see section 11.	
4.3	Indication of any immediate medical attention and special treatment needed		Get medical advice/attention.	
5	Firefighting measures			
		The material is not flammable. However, the metal powders dispersed in the air can cause a risk of fire and explosion. The molten metal, at high temperature, can ignite combustible materials. Avoid any source of heat (flame, sparks, static electricity).		
5.1	Extinguishing media			
	Suitable extinguishing equipment		Powder extinguisher.	
	Unsuitable extinguishing equipment		Water.	
5.2	Special hazards arising from the substance or mixture			



O.R.I. MARTIN
ACCIAIERIA E FERRIERA
DI BRESCIA S.P.A.

MATERIAL SAFETY DATA SHEET

BILLETS IN REINFORCING STEEL

Conforms to EC Regulation 1272/2008 and EU Regulation 453/2010

Revision nr 1
Dated 5th march 2012
Page 3 di 7

	Hazards caused by exposure in the event of fire	In case of fire, thermal decomposition or incomplete combustion may cause gases and vapors potentially dangerous to health.
5.3	Advice for firefighters	
	General information Special protective equipment for fire-fighters	<ul style="list-style-type: none">- In case of fire, wear suitable protective equipment (protective clothing and breathing apparatus).- Send away unprotected people.
6	Accidental release measures	
6.1	Personal precautions, protective equipment and emergency procedures	<ul style="list-style-type: none">- In case of formation of vapors or dust adopt respiratory protection.- Avoid contact with eyes and skin.
6.2	Environmental precautions	<ul style="list-style-type: none">- The material does not present particular risk to the environment. However, for accidental release, collect material with suitable tools.- The product must not penetrate into the sewer system or come into contact with surface water or ground water.
6.3	Methods and material for containment and cleaning up	<ul style="list-style-type: none">- Collect the product mechanically or manually.- Disposal of contaminated material must be done in accordance with the provisions of section 13.
6.4	Reference to other sections	Any information on personal protection and disposal is given in sections 8 and 13.
7	Handling and storage	
7.1	Precautions for safe handling	<ul style="list-style-type: none">- Solid form (billets) presents no problems for handling and storage except for accident prevention (crushing, cutting, striking during working processes of the material).- Do not eat, drink or smoke during use.
7.2	Conditions for safe storage, including any incompatibilities	<ul style="list-style-type: none">- Normal storage without particular incompatibilities.- As indication, store in a dry place, preferably indoors.
7.3	Specific end use(s)	Information not available.
8	Exposure controls/personal protection	
8.1	Control parameters	
	Threshold Limit Value	<p>There are no exposure limits for steel products. The limits are only applicable for certain constituents of the steel (alloy materials such as chromium, nickel, manganese, silica, molybdenum, etc.). These elements are not normally present during common use but may develop in the form of gas and dust during the working processes such as cutting, fusion, rolling of the material.</p> <p>According to ACGIH 2011, TLW-TVA-8h are:</p> <p><u>Iron (as oxide, dust and fumes):</u> 5 mg/m³</p> <p><u>Manganese e inorganic compounds (as Mn):</u> 0.2 mg/m³</p> <p><u>Chromium metal and chromium III:</u> A4 0.5 mg/m³</p> <p><u>Chromium VI (water soluble compounds):</u> A1 0.05 mg/m³</p> <p><u>Chromium VI (insoluble compounds):</u> A1 0.01 mg/m³</p> <p><u>Nickel (metal):</u> A5 1.5 mg/m³</p> <p><u>Nichel (soluble inorganic compounds):</u> A4 0.1 mg/m³</p> <p><u>Nichel (insoluble inorganic compounds):</u> A1 0.2 mg/m³</p> <p><u>Molybdenum (insoluble compounds and metal):</u> 10 mg/m³</p> <p><u>Molybdenum (soluble compounds):</u> A3 0.5 mg/m³</p> <p><u>Vanadium (as pentoxide, dust and fumes):</u> A3 0.05 mg/m³</p> <p><u>Silica (as crystalline silica):</u> A2 0.025 mg/m³</p>



O.R.I. MARTIN
ACCIAIERIA E FERRIERA
DI BRESCIA S.P.A.

MATERIAL SAFETY DATA SHEET

BILLETS IN REINFORCING STEEL

Conforms to EC Regulation 1272/2008 and EU Regulation 453/2010

Revision nr 1
Dated 5th march 2012
Page 4 di 7

		<u>Copper (fumes)</u> : 0.2 mg/m ³ <u>Copper (dusts and mists)</u> : 1 mg/m ³ <u>Sulfur (sulfur dioxide)</u> : A4 TLV-STEL = 0.25 ppm = 0.66 mg/m ³
8.2	Exposure controls	
	Precautionary measures	<ul style="list-style-type: none">- Keep away from food, drink. Do not eat, drink or smoke during use.- Wash hands before breaks and after work.- We recommend you change clothes that have absorbed the dust and fumes possibly formed during processing of the material. Use separate closets for clothing and shoes at work.- It's necessary local dust and fumes aspiration to ensure threshold limit value and air quality.
	Respiratory protection	<ul style="list-style-type: none">- If necessary, whether in the presence of dust or fumes, wear suitable respiratory protective equipment (gas masks and filtering face).- Adopt a respiratory protection in case of emergency with filter type P2 or P3 (for powders), type B2P2 or B3P3 (for fumes).
	Individual protection	<ul style="list-style-type: none">- Wear safety glasses in case of dust formation.- Wear suitable protective gloves.
9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Solid (billet)
	Colour	Silver-gray, metallic
	Odour	Odourless
	Odour threshold	Not determined
	pH	Not determined
	Melting point / freezing point	1400-1550°C (according to steel's types)
	Initial boiling point or Boiling range	Not applicable
	Flash point	Not combustible, not flammable (if not fine powder)
	Evaporation Rate	Not applicable
	Flammability of solids and gases	Not flammable
	Lower inflammability limit / Upper inflammability limit	Non infiammabile
	Vapour pressure	Not applicable
	Vapour density	Not applicable
	Relative density	7.7 – 8.1 g/cm ³ (according to steel's types)
	Solubility	Not soluble in water and organic solvents
	Partition coefficient: n-octanol/water	Not applicable
	Auto-ignition temperature	Not applicable
	Decomposition temperature	Not determined
	Viscosity	Not determined
	Explosive properties	Not applicable
	Oxidising properties	Not applicable
9.2	Other information	



O.R.I. MARTIN
ACCIAIERIA E FERRIERA
DI BRESCIA S.P.A.

MATERIAL SAFETY DATA SHEET

BILLETS IN REINFORCING STEEL

Conforms to EC Regulation 1272/2008 and EU Regulation 453/2010

Revision nr 1
Dated 5th march 2012
Page 5 di 7

	Molecular weight	Not determined
10	Stability and reactivity	
10.1	Reactivity	There are no particular risks of reaction with other substances in normal conditions of use.
10.2	Chemical stability	The product is stable in normal conditions of use and storage.
10.3	Possibility of hazardous reactions	No hazardous reactions are foreseeable in normal conditions of use and storage.
10.4	Conditions to avoid	<ul style="list-style-type: none">- Avoid the formation of dust: metal powders dispersed in the air can cause a risk of fire and explosion.- The molten metal, at high temperature, can ignite combustible materials. Avoid any source of heat (flame, sparks, static electricity).
10.5	Incompatible materials	None in particular.
10.6	Hazardous decomposition products	In case of thermal decomposition or fire, it may release gases and vapors potentially dangerous to health.
11	Toxicological information	
11.1	Information on toxicological effects	
	Potenziali effetti sulla salute	No episodes of health damage due to exposure to the product have been reported. Solid form don't cause health risk. However it is recommended to operate within the rules of good industrial hygiene.
	Inalazione	Information not available.
	Contatto con la pelle	Information not available.
	Contatto con gli occhi	Information not available.
	Ingestione	Information not available.
	Effetti cronici	Information not available.
12	Ecological information	
12.1	Toxicity	<ul style="list-style-type: none">- Use this product according to good working practices. Avoid leakage of the product into the environment.- No episodes of environmental damage have been reported. Solid form don't cause problems.
12.2	Persistence and degradability	Information not available.
12.3	Bioaccumulative potential	Information not available.
12.4	Mobility in soil	Information not available.
12.5	Results of PBT and vPvB assessment	Information not available.
12.6	Other adverse effects	Information not available.
13	Disposal considerations	
13.1	Waste treatment methods Transport information	<ul style="list-style-type: none">- Reuse, when possible. Product residues should be considered special non hazardous waste.- Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.- Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.- Avoid the product reach waterways or sewers.
14	Transport information	
	The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.	



O.R.I. MARTIN
ACCIAIERIA E FERRIERA
DI BRESCIA S.P.A.

MATERIAL SAFETY DATA SHEET

BILLETS IN REINFORCING STEEL

Conforms to EC Regulation 1272/2008 and EU Regulation 453/2010

Revision nr 1
Dated 5th march 2012
Page 6 di 7

	Note: If delivered hot, the product can fall in Class 9 of the ADR (section 2.2.9.1.13 of ADR 2007): Substances delivered hot includes substances carried or handed in liquid state at a temperature equal or higher than 100 ° C, and those having a flash point, at a temperature lower than their flash point. They also include solids which carried or handed at temperatures equal to or greater than 240 ° C.	
15	Regulatory information	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
	Seveso category	None.
	Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006	Point 27 (Nickel alloy steels)
	Substances in Candidate List (Art. 59 REACH)	None.
	Substances subject to authorisation (Annex XIV REACH)	None.
	Healthcare controls	Information not available.
15.2	Chemical safety assessment	No chemical safety assessment has been processed for the mixture and the substances it contains
16	Other information	
	Text of hazard (H) indications mentioned in section 3 of the sheet	-
	Text of risk (R) phrases mentioned in section 2-3 of the sheet	-
	General bibliography	<ol style="list-style-type: none">1. Directive 1999/45/EC and following amendments2. Directive 67/548/EEC and following amendments and adjustments3. Regulation (EC) 1907/2006 (REACH) of the European Parliament4. Regulation (EC) 1272/2008 (CLP) of the European Parliament5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament6. Regulation (EC) 453/2010 of the European Parliament The Merck Index. Ed. 107. The Merck Index. Ed. 108. Handling Chemical Safety9. Niosh - Registry of Toxic Effects of Chemical Substances10. INRS - Fiche Toxicologique11. Patty - Industrial Hygiene and Toxicology12. N.I. Sax - Dangerous properties of Industrial Materials-7 Ed., 198913. Material safety data sheet CALCE IDRATA SPENTA – rev. 1 of november 2010 (Unicalce S.p.a.)14. Material safety data sheet GARDOBOND Z 3400 E 4 – rev. 5 of 4th november 2010 (Chemetall Italia S.r.l.)15. Material safety data sheet GARDOLUBE L6186 – rev. 1 of 15th june 2010 (Chemetall Italia S.r.l.)
	Note for users	<ul style="list-style-type: none">- Product for industrial uses, not expected to be sold freely.- The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.- This document must not be regarded as a guarantee on



O.R.I. MARTIN
ACCIAIERIA E FERRIERA
DI BRESCIA S.P.A.

MATERIAL SAFETY DATA SHEET

BILLETS IN REINFORCING STEEL

Conforms to EC Regulation 1272/2008 and EU Regulation 453/2010

Revision nr 1
Dated 5th march 2012
Page 7 di 7

		<p>any specific product property.</p> <ul style="list-style-type: none">- The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.- Observe the safety instructions.- Provide appointed staff with adequate training on how to use chemical products.
	Information on present review	<p>Every section of the present sheet has been reviewed for updating safety, health and environmental legislation and informations.</p> <p>In particular, have been revised content and form required for the Safety Data Sheet in accordance with the amendments to EC Regulation 1907/2006 occurred with the entry into force of EU Regulation 453/2010. The present sheet was prepared in accordance with Annex I of EU Regulation 453/2010, pursuant to Article 61 (paragraph 1) of EC Regulation 1272/2008.</p>
	Changes to previous review	All sections.