

## SPECIAL STEEL BILLETS

In accordance with Regulation (EC) 1907/2006 Art. 31 and Regulation (EU) 2015/830 Revision nr 2 Dated 3<sup>th</sup> september 2018 Page 1 di 8

1	Identification of the substance/mixture	e and of the company/undertaking
1.1	Product identifier	
	Product name	Special steel billets
	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	Special steel billets
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	info@orimartin.it
	responsible for the Safety Data Sheet	
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	
	(CLP) (and subsequent amendments and supplen	nt to the provisions set forth in Regulation (EC) 1272/2008 nents). However, cause the product contains dangerous n section 3 and 8, it thus requires a safety data sheet that 907/2006 and subsequent amendments.
	Regulation 1272/2008 (CLP) and following amendments and adjustments	-
	The full wording of the Hazard statements (H) phrases is given in section 16 of the sheet.	
2.2	Label elements	
	This product is not subject to hazard labeling pursuant to Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and supplements).	
	Hazard pictograms	-
	Signal word	-
	Hazard statements	-
	Precautionaly statements	-
2.3	Altri pericoli	Information not available.



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3	Composition/inf	formation on ingredien	ts		
3.1	Substances		Information not relevant.		
3.2	Mixtures				
	Contains:				
	Identification	Conc. %.		Classification 1272/2008 (CLP)	
	Alloy steel containing hazardous substances with metallic bonds	$\begin{array}{l} \mbox{Manganese} (\mbox{Mn}) - CAS: 7439-9\\ \mbox{Silica} (\mbox{Si}) - CAS: 7440-21-3, CE\\ \mbox{Copper} (\mbox{Cu}) - CAS: 7440-31-5, CE:\\ \mbox{Copper} (\mbox{Cu}) - CAS: 7440-31-5, CE:\\ \mbox{Chromium} (\mbox{Cr}) - CAS: 7440-31-5, CE:\\ \mbox{Chromium} (\mbox{Cr}) - CAS: 7440-32-6, C\\ \mbox{Molibdenum} (\mbox{Mo}) - CAS: 7429-90-\\ \mbox{Boron} (\mbox{B}) - CAS: 7440-42-8, CE\\ \mbox{Titanium} (\mbox{Ti}) - CAS: 7440-32-6, C\\ \mbox{Calcium} (\mbox{Ca}) - CAS: 7440-32-6, C\\ \mbox{Calcium} (\mbox{Ca}) - CAS: 7440-32-6, C\\ \mbox{Calcium} (\mbox{Ca}) - CAS: 7440-38-2, Lead (\mbox{Pb}) - CAS: 7440-38-2, Lead (\mbox{Pb}) - CAS: 7440-38-2, Lead (\mbox{Pb}) - CAS: 7440-38-2, C\\ \mbox{Molframium} (\mbox{W}) - CAS: 7440-48-4, C\\ \mbox{Vanadium} (\mbox{V}) - CAS: 7440-48-4, C\\ \mbox{Vanadium} (\mbox{Mo}) - CAS: 7440-48-4, C\\ \mbox{Vanadium} (\mbox{V}) - CAS: 7440-48-4, C\\ Vanad$	28-0: $0.01/1.5$ % E: 231-722-6: $0.001/0.5$ % E: 231-722-6: $0.001/0.1$ % 6-5, CE: 231-105-1: $0.2/4$ % E: 231-130-8: $0.01/5$ % CE: 231-159-6: $0.01/0.9$ % 231-141-8: $0.001/0.9$ % 231-141-8: $0.001/0.05$ % -3, CE: 231-157-5: $0.01/9$ % E: 231-111-4: $0.01/5$ % 98-7, CE 231-107-2: $0.01/2$ % 5, CE: 231-072-3: $0.001/0.1$ % CE: 231-151-2: $0.0001/0.1$ % CE: 231-142-3: $0.001/0.1$ % CE: 231-142-3: $0.001/0.005$ % CE: 231-148-6: $0.001/0.01$ % E: 231-148-6: $0.001/0.01$ % E: 231-148-6: $0.001/0.01$ % CE: 231-143-9: $0.01/0.05$ % CE: 231-143-9: $0.001/0.05$ % CE: 231-143-9: $0.001/0.01$ % A, CE: 231-143-5: $0.0001/0.01$ % CE: 231-146-5: $0.0001/0.01$ % CE: 231-146-5: $0.0001/0.01$ % CE: 231-154-9: $0.0001/0.01$ % CE: 231-154-9: $0.0001/0.0005$ % 2, CE: 231-164-6: $0.0001/0.0005$ % 2, CE: 231-176-9: $0.0001/0.0005$ % 2, CE: 231-176-9: $0.0001/0.0001$ % CE: 231-176-9: $0.0001/0.0001$ % CE: 231-176-9: $0.0001/0.0005$ % 2, CE: 231-162-7: $0/0.0001$ % CE: 231-176-9: $0.0001/0.0001$ % CE: 231-176-9: $0.0001/0.0005$ % 9, CE: 231-152-8: $0/0.0001$ % CE: 231-176-9: $0.0001/0.0005$ % 9, CE: 231-177-4: $0.0001/0.2$ %		
	The full wording of th		ases 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 eyelid contact lenses). If symptoms persist, s		
	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 su Blow your nose repeatedly. If sympton medical advice/attention.		
	Ingestion		Rinse mouth with water. If symptoms advice/attention.	persist, get medical	
4.2	Most important syn acute and delayed	nptoms and effects, both	For symptoms and effects caused by t substances, see section 11.	he contained	
4.3	Indication of any im and special treatme	nmediate medical attention ent needed	Get medical advice/attention.		
5	Firefighting mea	asures	·		
			The material is not flammable. However powders dispersed in the air can caus		



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		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	
	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> <li>In case of fire, wear suitable protective equipment (protective clothing and breathing apparatus).</li> </ul>
		- Send away unprotected people.
6	Accidental release measures	
6.1	Personal precautions, protective equipment and emergency procedures	- In case of formation of vapors or dust adopt respiratory protection.
		- Avoid contact with eyes and skin.
6.2	Environmental precautions	- 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	- Collect the product mechanically or manually.
	cleaning up	- 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	- 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	- Normal storage without particular incompatibilities.
	incompatibilities	- As indication, store in a dry place, preferably indoors.
7.3	Specific end use(s)	Information not available.
8	Exposure controls/personal protection	n
8.1	Control parameters	
	Threshold Limit Value	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.
	National occupational exposure limit values	Information not available.
	Union limit values	OEL EU
		Manganese e inorganic compounds (as Mn):
		TLV-TWA/8h: 0.2 mg/m3 (inhalable fraction), 0.05 mg/m3 (respirable fraction)



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		Crystalline silica powder:
		TLV-TWA/8h: 0,1 mg/m3 (frazione inalabile)
	Other occupational exposure limit values	TLV-TWA-8h (ACGIH, 2018) are:
		Iron (as Fe2O3): 5 mg/m3 (respirable fraction)
		Manganese e inorganic compounds (as Mn): 0.2 mg/m3 (inhalable fraction), 0.1 mg/m3 (respirable fraction)
		Chromium metal: A4 0.5 mg/m3 (inhalable fraction)
		Chromium III (water soluble compounds): A4 0.003 mg/m3 (inhalable fraction)
		Chromium VI (water soluble compounds): A1 0.0002 mg/m3 (inhalable fraction)
		Nickel (metal): A5 1.5 mg/m3 (inhalable fraction)
		Nichel (soluble inorganic compounds): A4 0.1 mg/m3 (inhalable fraction)
		Nichel (insoluble inorganic compounds): A1 0.2 mg/m3 (inhalable fraction)
		Molybdenum (insoluble compounds and metal): 10 mg/m3 (inhalable fraction), 3 mg/m3 (respirable fraction)
		Molybdenum (soluble compounds): A3 0.5 mg/m3 (respirable fraction)
		Vanadium (as pentoxide, dust and fumes): A3 0.05 mg/m3 (inhalable fraction)
		Silica (as crystalline silica): A2 0.025 mg/m3 (respirable fraction)
		Copper (fumes): 0.2 mg/m3
		Copper (dusts and mists): 1 mg/m3
		Sulfur (sulfur dioxide) : A4 TLV-STEL: 0.25 ppm = 0.66 mg/m3(respirable fraction)
	Biological limit values	Information not available.
	DNELs	Information not available.
	PNECs	Information not available.
	Recommended monitoring procedures	The product contains components with exposure limits, personal monitoring of the atmosphere in the work environment and biological may be required to determine the effectiveness of ventilation or other control measures and / or the need to use respiratory protective equipment . Refer to the monitoring standards, such as the following:
		• European standard EN 689 (Atmosphere in the workplace - Guidance on the evaluation of exposure by inhalation to chemical compounds for the purpose of comparison with limit values and measurement strategy)
		• European standard EN 14042 (Atmospheres in the workplace - Guide to the application and use of procedures for the assessment of exposure to chemical and biological agents)
		• European standard EN 482 (Atmospheres in the working environment - General requirements for the performance of procedures for the measurement of chemical agents)
		Reference should also be made to national guidance documents on methods for the determination of hazardous substances.
8.2	Exposure controls	
	Precautionary measures	<ul> <li>Keep away from food, drink. Do not eat, drink or smoke during use.</li> </ul>



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		- Wash hands before breaks and after work.
		<ul> <li>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.</li> </ul>
		<ul> <li>It's necessary local dust and fumes aspiration to ensure threshold limit value and air quality.</li> </ul>
	Eye/face protection	<ul> <li>Wear safety glasses in case of dust formation (see UNI EN 402 standard).</li> </ul>
	Skin protection	<ul> <li>Use suitable work clothes and safety shoes (see EN ISO 20344 standard).</li> </ul>
	Hand protection	<ul> <li>Wear suitable protective gloves (see UNI EN 374 standard). The following must be considered for the final choice of the glove material: compatibility, degradation, break time and permeation. The process of using the product and any other products deriving from it must also be evaluated. The gloves have a wear time that depends on the duration of exposure and how to use it.</li> </ul>
	Respiratory protection	<ul> <li>If necessary, whether in the presence of dust or fumes, wear suitable respiratory protective equipment (gas masks and filtering face). (see UNI EN 149 standard)</li> </ul>
		<ul> <li>Adopt a respiratory protection in case of emergency with filter type P2 or P3 (for powders), type B2P2 or B3P3 (for fumes).</li> </ul>
	Thermal hazard	None.
	Environmental exposure controls	Do not dispose of the product in the environment.
9	Proprietà fisiche e chimiche	
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/cm3 (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
	Viscosity Explosive properties	Not determined Not applicable



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	Oxidising properties	Not applicable
9.2	Other information	
	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> <li>Avoid the formation of dust: metal powders dispersed in the air can cause a risk of fire and explosion.</li> </ul>
		<ul> <li>The molten metal, at high temperature, can ignite combustible materials. Avoid any source of heat (flame, sparks, static electricity).</li> </ul>
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	
	Potential health effects	No episodes of health damage due to exposure to the product have been reported. Sold solid form don't cause health risk. However it is recommended to operate within the rules of good industrial hygiene.
	Acute toxicity	Information not available.
	Skin corrosion/irritation	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	Serious eye damage/irritation	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	Respiratory or skin sensitisation	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	Germ cell mutagenicity	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	Carcinogenicity	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	Reproductive toxicity	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	STOT-single exposure	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	STOT-repeated exposure	Based on the available data, the classification criteria are not met, as the product does not contain components



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		classified as dangerous for this effect. For more information see section 3.
	Aspiration hazard	Based on the available data, the classification criteria are not met, as the product does not contain components classified as dangerous for this effect. For more information see section 3.
	Possible route of exposure	Dermal contact.
	Symptoms related to the physical, chemical and toxicological characteristics	Information not available.
	Delayed and immediate effects as well as chronic effects from short and long term exposure	Information not available.
	Interactive effects	Information not available.
12	Ecological information	
12.1	Toxicity	- Use this product according to good working practices. Avoid leakage of the product into the environment.
		<ul> <li>No episodes of environmental damage have been reported. Solid form don't cause problems.</li> </ul>
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	- Reuse, when possible. Product residues should be considered special non hazardous waste.
		<ul> <li>Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.</li> </ul>
		<ul> <li>Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.</li> </ul>
		- Avoid the product reach waterways or sewers.
14	Transport information	
		sions of the Code of International Carriage of Dangerous nternational Maritime Dangerous Goods Code (IMDG), and A) regulations.
14.1	UN number	Not applicable.
14.2	UN proper shipping name	Not applicable.
14.3	Trasport hazard classes	Not applicable.
14.4	Packing group	Not applicable.
14.5	Environmental hazards	Not applicable.
14.6	Special precautions for user	Not applicable.
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Note: If delivered hot, the product can fall in Class 9 of the ADR (section 2.2.9.1.13 of ADR delivered hot includes substances carried or handed in liquid state at a temperature equal o C, and those having a flash point, at a temperature lower than their flash point. They also in carried or handed at temperatures equal to or greater than 240 ° C.		led in liquid state at a temperature equal or higher than 100 $^\circ$



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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 authorisarion (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	-
	General bibliography	Regulation (EC) 1907/2006 (REACH) of the European Parliament and subsequent amendments and supplements Regulation (EC) 1272/2008 (CLP) of the European Parliament and subsequent amendments and supplements Regulation (EU) 2015/830 of the European Parliament The Merck Index Handling Chemical Safety Niosh - Registry of Toxic Effects of Chemical Substances INRS - Fiche Toxicologique Patty - Industrial Hygiene and Toxicology N.I. Sax - Dangerous properties of Industrial Materials ACGIH - Threshold limit values ECHA web site
	Note for users	<ul> <li>Product for industrial uses, not expected to be sold freely.</li> <li>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.</li> <li>This document must not be regarded as a guarantee on any specific product property.</li> <li>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.</li> <li>Observe the safety instructions.</li> <li>Provide appointed staff with adequate training on how to use chemical products.</li> </ul>
	Information on present review	This safety data sheet has been prepared in accordance with Annex II of Regulation (EC) 1907/2006, as amended by Regulation (EU) 2015/830.
	Changes to previous review	Sections 2, 3, 8, 11, 16.