

(11261)



Material Safety Data Sheet

HOT ROLLED SHEET STEEL

Section 1- PRODUCT IDENTIFICATION

Material	HOT ROLLED SHEET STEEL		WHMIS Class D2A, D2B
Synonyms	Carbon Sheet Steel, Dofascoloy, Hot Band, Pickled & Oiled Steel		
Manufacturer	ArcelorMittal Dofasco Inc., P.O. Box 2460, Hamilton, Ontario, Canada L8N 3J5		
General Information:	1-905-547-8200 x 2959	Material Use Manufacture of steel articles	
Emergency Contact:	1-760-476-3962 Company Code: 333211		

Section 2 - HAZARDOUS INGREDIENTS

Hazardous Ingredients	Weight %	CAS No.	LD50	Exposure Limit (mg/m ³)
Steel:				
Iron (Fe)	~ 95	7439-89-6	30 g/kg (rat-oral)	5 (Fume)
Manganese (Mn)	≤ 1.65	7439-96-5	9 g/kg (rat-oral)	0.2
Chromium (Cr)	≤ 1.1	7440-47-3	Unknown	0.5
Nickel (Ni)	≤ 0.12	7440-02-0	Unknown	1.5
(Hazardous Ingredients – lists components which meet the reporting requirements of the Hazardous Products Act.)				

Coating:
(No Coating Applied)

Surface Treatments:
(Constitutes less than 0.1% of total steel weight)

- Dry Lube (Gilcote 4127)
100% mixture of Borax and carbonate soaps
Dried material has a typical surface coating of 2.2 to 6.5 g/m²
- Oils (PL-7105-A, Quaker Ferrocote 61 MAL HCL-1G, Quaker Ferrocote 61-AUS)
Hydrotreated naphthenic mineral oils or petroleum hydrocarbon based lubricating oils containing petroleum sulphonates and anti-oxidants.
Oil coating weights range from 1.1 to 5.4 g/m² per side.

APPROVED MATERIAL

 JAN 31 2013

 MSDS # 11261
 APPROVED BY [Signature]

Note: Supplier MSDS for surface treatment oils are available from your ArcelorMittal Dofasco Technical Service Manager. ArcelorMittal Dofasco Steel products do not contain and are not manufactured with any Class I or Class II ozone depleting substances. ArcelorMittal Dofasco Hot Rolled sheet steel products ordered for automotive applications are produced in conformance with the End of Life Vehicle (ELV) Directive 2000/53/EC and Global Automotive Declarable Substance List (GADSL) Feb. 1/2012. All ArcelorMittal Dofasco Hot Rolled products supplied to automotive are listed within International Material Data System (IMDS).



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Section 3 – PHYSICAL DATA	Section 4 – FIRE AND EXPLOSION DATA
Silver Grey Metallic Solid Boiling Pt. (°C) – Not applicable Melting Pt. (°C) - 1530 Specific Gravity - 7.5 to 8	Non – Flammable. Will not support combustion
	Section 5 – REACTIVITY DATA
	Stable: Contact with strong mineral acids will release flammable hydrogen gas

Section 6 – TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY

None in its natural state. Operations such as welding, burning, grinding or machining may pose acute or chronic inhalation health effects. Skin or eye contact with coating oils may cause irritation with prolonged or repeated contact.

EFFECTS OF ACUTE EXPOSURE

None to sheet steel. Welding, burning, grinding or machining can generate metal particulate or elemental oxide fumes. Inhalation overexposure to manganese fume has been reported to cause "metal fume fever" characterized by fever and chills (i.e., flu-like symptoms). Such an overexposure is unlikely due to the small amount of manganese available. Fumes or mists of surface treatment oils may irritate the eyes and upper respiratory tract, and cause headache, dizziness and / or nausea if exposure is excessive.

EFFECTS OF CHRONIC EXPOSURE

None to sheet steel. Chronic inhalation overexposure to metal fume (i.e., iron oxide fume) may cause a benign pneumoconiosis (i.e., siderosis) with few or no symptoms. Repeated or prolonged contact to coating oils may cause skin irritation and dermatitis. The health hazards associated with exposure to chromium are dependent upon its oxidation state. The metal form of chromium as it exists in this product is of very low toxicity. The hexavalent form 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 cancer.

IRRITANCY None	Carcinogenicity- Chromium and Nickel (See Additional Information) Reproductive, Teratogenicity, Mutagenicity – no known effects	SYNERGISTIC MATERIALS Unknown
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Section 7 – PREVENTATIVE MEASURES

Dependent upon the process being performed on the sheet steel material.
Each operation must be addressed for suitable personal protective equipment required.
General ventilation is normally adequate. Welding requires local exhaust ventilation or fume filter respirator, gloves and eyewear. Avoid prolonged or repeated skin contact, launder oil-contaminated clothing. Use oil impervious gloves if required to prevent contact. Avoid eye contact with oil contaminated hands.

Section 8 – FIRST AID MEASURES

Eyes - Flush with water
Skin - Wash contact areas with soap and water
Inhalation - For overexposure to metal fume, remove person to fresh air. Seek medical attention.

ADDITIONAL INFORMATION

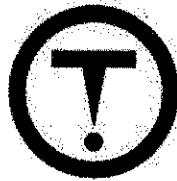
IARC lists certain hexavalent chromium compounds under its Group 1 - "Confirmed Human Carcinogen". IARC lists certain nickel compounds under its Group 2A - "Suspected Human Carcinogen". Welding fume may also contain contaminants from fluxes and / or other welding consumables. Oil coatings should be removed prior to welding or grinding to minimize smoke generation.

Section 9 – PREPARATION DATE

PREPARED BY Health and Safety Department	PHONE (905) 548-7200 Ext. 2595	DATE PREPARED December 19, 2012
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STEEL ACIER

REFER TO MATERIAL SAFETY DATA SHEET



CONSULTER LA FICHE SIGNALÉTIQUE

Overexposure to dusts or fumes generated during welding or burning steels, particularly those containing chromium or nickel, may cause respiratory disease.

High exposure to fumes during welding or burning of zinc coated products can cause reversible short-term flu-like symptoms.

Prolonged skin contact with coated steel may cause skin irritation in sensitive individuals.

LIMIT inhalation of dusts or fumes generated during processing.

LIMIT skin contact.

Overexposure to metal fumes: Move to fresh air. Seek medical attention if necessary.

Skin contact: Wash with soap and water.

Read the relevant Material Safety Data Sheet for more information

La surexposition aux poussières ou aux fumées générées lors du soudage ou brûlure des aciers, en particulier ceux contenant du chrome ou de nickel, pourrait causer des maladies respiratoires.

Une exposition intensive aux fumées lors du soudage des produits revêtus de zinc pourrait provoquer à court terme des symptômes réversibles de grippe.

Un contact prolongé avec de l'acier revêtu pourrait provoquer une irritation cutanée chez les personnes sensibles.

LIMITER l'inhalation des poussières ou des fumées générées pendant le traitement.

LIMITER Le contact avec la peau.

Si l'individu est surexposé aux fumées venant des métaux, emmenez la personne au grand air. Demandez des soins médicaux si nécessaire.

S'il y a contact avec la peau, lavez la peau avec l'eau et du savon.

Lire la fiche signalétique pour plus d'information.



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*ArcelorMittal Dofasco Inc.,
P.O. Box 2460,
Hamilton, Ontario L8N 3J5
1-905-548-7200
1-800-DOFASCO*

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