

HPD UNIQUE IDENTIFIER: 27304

CLASSIFICATION: 05 12 00 Structural Steel Framing

PRODUCT DESCRIPTION: This HPD covers the assessment of the following Emirates Steel products: Carbon Steel Reinforcing Bar (Rebar) - Bar 8 to 40 mm and Coil 8 to 16 mm; Plain Round Wire Rod in Coil 5.5 to 16 mm; and Structural Steel Sections - Non-Alloy Structural Steel (Beams, Columns & Channels and Sheet Piles). Used exclusively in Civil Engineering, rebar products are designed to provide tensile strength to concrete. Wire Rods are designed for a host of product applications such as fasteners, screws, automotive, welding & electrode, construction, engineering, springs, fences, nails, pins and other general applications. Heavy Sections are long steel products used for various applications such as foundations for buildings in the construction sector and in the production of structures for industrial and engineering applications. Sheet Piles are Z or U shaped long structural sections with a vertical interlocking system that creates a continuous wall. Interlocked sheet piles form a wall which is earth tight or water resistant and are commonly used for the construction of retaining walls, cofferdams, bulkheads and seawalls. All products are produced in accordance with relevant international standards and customer-specific requirements.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i>
<input type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	<input checked="" type="radio"/> Considered	Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	<input type="radio"/> Partially Considered	<i>% weight and role provided for all substances.</i>
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	<input type="radio"/> Not Considered	Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other	Explanation(s) provided for Residuals/Impurities?	<i>All substances screened using Priority Hazard Lists with results disclosed.</i>
<input checked="" type="radio"/> Product		<input checked="" type="radio"/> Yes <input type="radio"/> No	Identified <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
			<i>All substances disclosed by Name (Specific or Generic) and Identifier.</i>

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE
HOT ROLLED STEEL PRODUCTS [IRON ORES, AGGLOMERATES
NoGS MANGANESE LT-P1 | END | MUL | REP COAL NoGS IRON,
ELEMENTAL LT-P1 | END SILICON, ELEMENTAL LT-UNK
ANTHRACITE LT-UNK CALCINED PETROLEUM COKE LT-UNK
CARBON LT-UNK NICKEL LT-1 | CAN | RES | MAM | MUL | SKI QUARTZ
LT-1 | CAN FERRIC OXIDE BM-1 | CAN FERROCHROMIUM NoGS]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1
 Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Emirates Steel worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: No VOC Emissions Certificate
 Recycled content: SCS Recycled Content Certification - Products

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

- Yes
- No

PREPARER: ToxServices LLC
 VERIFIER: SCS Global Services
 VERIFICATION #: qGE-10452

SCREENING DATE: 2020-08-08
 PUBLISHED DATE: 2022-01-25
 EXPIRY DATE: 2023-08-08

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.2, available on the HPDC website at: www.hpdc-collaborative.org/hpd-2-2-standard

HOT ROLLED STEEL PRODUCTS

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Emirates Steel worked with the HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

OTHER PRODUCT NOTES:

IRON ORES, AGGLOMERATES

ID: 65996-65-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-08-09 6:26:16

#: 96.1200 - 97.6700 GS: NoGS RC: None NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-08-09 6:26:16

#: 1.9500 - 3.1800 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES:

COAL

ID: 125612-26-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-08-09 6:26:17

#: 0.5200 - 1.7200 GS: NoGS RC: None NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This coal substance entry covers Bituminous rank.

IRON, ELEMENTAL

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:17**%: **0.3900 - 1.2400** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES:

SILICON, ELEMENTAL

ID: 7440-21-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:17**%: **0.3700 - 2.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

ANTHRACITE

ID: 8029-10-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:17**%: **0.3000 - 0.9000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This coal substance entry covers Anthracite rank.

CALCINED PETROLEUM COKE

ID: 64743-05-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:17**%: **0.2100 - 0.8200** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

CARBON

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:18**%: **0.2000 - 0.3400** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

NICKEL

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:18**%: **0.0000 - 0.4000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	CA EPA - Prop 65	Carcinogen
CAN	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
MAM	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction

SUBSTANCE NOTES:

QUARTZ

ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:18**%: **0.0000 - 0.1000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	GHS - Australia	H350i - May cause cancer by inhalation
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]

SUBSTANCE NOTES:

FERRIC OXIDE

ID: 1309-37-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:18**

%: **0.0000 - 0.1000** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-1 was provided through the HPD 2.2 Builder Tool.

FERROCHROMIUM

ID: 11114-46-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-08-09 6:26:19**

%: **0.0000 - 0.3200** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS	No VOC Emissions Certificate		
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2020-07-	EXPIRY DATE: 2023-	CERTIFIER OR LAB: N/A
APPLICABLE FACILITIES: N/A	01	07-01	
CERTIFICATE URL:			
CERTIFICATION AND COMPLIANCE NOTES: CDPH Standard V1.2 (Section 01350/CHPS)- Not applicable			

RECYCLED CONTENT	SCS Recycled Content Certification - Products		
CERTIFYING PARTY: Third Party	ISSUE DATE:	EXPIRY DATE:	CERTIFIER OR LAB: SCS
APPLICABLE FACILITIES: Abu Dhabi, United Arab Emirates	2021-08-27	2022-08-26	Global Services
CERTIFICATE URL:			
https://cdn.scs-certified.com/products/cert_pdfs/EmiratesSteel_2021_SCS-RC-06311_s_v2.pdf			
CERTIFICATION AND COMPLIANCE NOTES: Recycled Content Certificate number: SCS-RC-06311. Conforms to SCS Recycled Content Standard V7-0 for Average 11% with at least 3% Post-Consumer and Balance 8% Pre-Consumer Metal Content (plant-wide weighted Average). The material quantification and mass-balance calculations are completed on a dry-weight basis.			

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

Emirates Steel worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

MANUFACTURER INFORMATION

MANUFACTURER: Emirates Steel Industries Co. PJSC (Emirates Steel)
ADDRESS: Industrial City of Abu Dhabi (ICAD-1)
Musaffah Abu Dhabi 9022, UAE
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The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
BM-2 Benchmark 2 (use but search for safer substitutes)	NoGS No GreenScreen.
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.