



HPD UNIQUE IDENTIFIER: 847624192

CLASSIFICATION: 05 31 13 Steel Floor Decking

PRODUCT DESCRIPTION: This HPD covers Tata Steel's ComFlor® family of products, namely ComFlor® 46, ComFlor® 51, ComFlor® 51+, ComFlor® 60, ComFlor® E60, ComFlor® 80, ComFlor® 100, ComFlor® 210 and ComFlor® 225. The products are manufactured at Tata Steel's sites in Port Talbot, Llanwern and Shotton (UK) as hot dip zinc coated steel coils, which are then either profiled in Shotton or shipped to Dubai (UAE) where they are uncoiled, profiled and cut to length, ready for dispatch to the customer. The products are used in composite floor slabs, consisting of the ComFlor® steel profile, minimal mesh/fibre reinforcement, with an in-situ concrete topping. This allows for rapid installation of flooring at relatively low cost, providing a high level of fire-resistance.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
☐ Nested Materials Method	☒ 100 ppm	☒ Completed	Characterized ☒ Yes ☐ No
☒ Basic Method	☐ 1,000 ppm	☐ Partially Completed	<i>Provided weight and role.</i>
Threshold Disclosed Per	☐ Per GHS SDS	☐ Not Completed	Screened ☒ Yes ☐ No
☐ Material	☐ Other	Explanation(s) provided :	<i>Provided screening results using HPDC-approved methods.</i>
☒ Product		☒ Yes ☐ No	Identified ☒ Yes ☐ No
			<i>Provided name and CAS RN or other 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.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

COMFLOR® PRODUCTS (TATA STEEL INTERNATIONAL (MIDDLE EAST) AND BUILDING SYSTEMS UK) [IRON LT-P1 | END ZINC LT-P1 | MUL | AQU MANGANESE LT-P1 | END | MUL | REP | MAM | AQU COPPER LT-P1 | MUL | AQU | MAM NICKEL LT-1 | CAN | MUL | RES | MAM | SKI | AQU ALUMINUM BM-1 | END | PHY | MAM CARBON LT-UNK CHROMIUM LT-P1 | END | SKI | MAM | REP | RES SILICON LT-UNK NIOBIUM LT-UNK PHOSPHORUS BM-2 | MAM | PHY | EYE | AQU | SKI COBALT LT-1 | CAN | REP | MUL | RES | GEN | EYE | MAM | SKI | AQU MOLYBDENUM LT-UNK | MAM | SKI | REP TIN LT-P1 | MAM | EYE | AQU SULFUR LT-UNK | SKI | MAM]

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, LT-1, BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This HPD has been prepared using the Basic Inventory method with a reporting threshold of 100ppm. A single HPD has been prepared for assessment of the ComFlor® range because the products are functionally similar, the information presented applies to all products, and content differences between the products do not account for 10% or more of the total mass of each product. The products contain materials with Special Conditions (metal alloy ingredients) as per the HPDC guidance (ref. SCMetalAlloy/2023-07-20). This HPD uses the 'Alloying Element Option' under that guidance, which follows the typical HPD Open Standard instructions. All intentionally added ingredients, residuals and impurities were considered for the purposes of this HPD.

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: Inherently non-emitting source per LEED Environmental Product Declaration (EPD): Environmental Product Declaration (EPD) by Tata Steel UK Limited

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

☒ Yes

PREPARER: Self-Prepared

VERIFIER: Vertima

SCREENING DATE: 2024-05-16

PUBLISHED DATE: 2024-05-16

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

COMFLOR® PRODUCTS (TATA STEEL INTERNATIONAL (MIDDLE EAST) AND BUILDING SYSTEMS UK)

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes
RESIDUALS AND IMPURITIES NOTES: All residuals and impurities were considered under the preparation of this HPD by obtaining details of the full formulation, including residuals and impurities, down to the 100 ppm threshold. The type and concentration of residuals and impurities has been determined by Tata Steel from the steel technical specification, and confirmed by chemical analyses of production samples.	
OTHER PRODUCT NOTES: The elements of the galvanised steel are presented as weight ranges because of product variability. This variability comes from the CEN standard to which the galvanised steel is prepared, EN 10346:2015, in which the constituent elements are specified with maximum and minimum values. In addition, many of the constituent elements are residuals, and are maintained below upper limits during steelmaking so as to not impact the steel properties. The gauge of the galvanised steel product can vary and since the zinc based coating thickness is always the same, the relative proportions of the steel substrate to this coating can also be different.	

IRONID: 7439-89-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:01	
%: 95.5300 - 95.9200	GreenScreen: LT-P1	RC: Both	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: All steel manufactured by Tata Steel's European operations contains recycled steel. This recycled steel is added during the manufacture of the liquid steel in the Basic Oxygen Furnace. It typically comprises between 15% and 20% by weight as an average across the complete range of our steel products and consists of both pre- and post-consumer content. The post-consumer content scrap comes from a wide variety of recycled steel products including structural beams and sections, automotive parts and panels, and domestic appliances such as washing machines and refrigerators. The elements of the galvanised steel are presented as weight ranges – please see ‘Other Product Notes’ in Section 2 for details.

ZINCID: 7440-66-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:02	
%: 2.8100 - 3.9100	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Coating

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
SUBSTANCE NOTES:		

MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-05-16 5:16:02

%: 0.4800 - 0.6800

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products
SUBSTANCE NOTES:		

COPPER

ID: 7440-50-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:02	
%: 0.0000 - 0.0970	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters	
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]	
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Perkins+Will (P+W)		P&W - Precautionary List	
			Precautionary list of substances recommended for avoidance	
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List	
			Antimicrobials	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)		C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022	
			Biological and Environmentally Released Materials	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)		C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022	
			Children's Products	
SUBSTANCE NOTES:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-05-16 5:16:03

%: 0.0000 - 0.0970

GreenScreen: LT-1

RC: None

NANO: No

SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
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
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
CAN	GHS - New Zealand	Carcinogenicity category 2
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Certain Metals
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Footwear, Apparel & Jewelry Products
SUBSTANCE NOTES:		

ALUMINUM

ID: 7429-90-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:02	
%: 0.0190 - 0.0780	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
PHY	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]		
PHY	GHS - Malaysia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
PHY	GHS - New Zealand	Pyrophoric solids category 1		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products
SUBSTANCE NOTES:		

CARBON

ID: 7440-44-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-16 5:16:02		
%: 0.0430 - 0.0680	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List	
			Antimicrobials	
SUBSTANCE NOTES:				

CHROMIUM

ID: 7440-47-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-16 5:16:02		
%: 0.0000 - 0.0580	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
REP	GHS - New Zealand	Reproductive toxicity category 2		
RES	GHS - Japan	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1A]		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Cosmetics & Personal Care Products
SUBSTANCE NOTES:		

SILICON

ID: 7440-21-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-16 5:16:03		
%: 0.0000 - 0.0290	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES:				

NIOBIUM

ID: 7440-03-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-16 5:16:03		
%: 0.0170 - 0.0270	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:03	
?: 0.0000 - 0.0230	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances		
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1		
PHY	GHS - New Zealand	Pyrophoric solids category 1		
EYE	GHS - New Zealand	Serious eye damage category 1		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1		
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects		
SKI	GHS - New Zealand	Skin corrosion category 1A		
MAM	GHS - New Zealand	Acute dermal toxicity category 1		
MAM	GHS - New Zealand	Acute inhalation toxicity category 1		
MAM	GHS - New Zealand	Acute oral toxicity category 1		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Cosmetics & Personal Care Products		
SUBSTANCE NOTES:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:04	
?: 0.0000 - 0.0190	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence		
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B		
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant		
CAN	CA EPA - Prop 65	Carcinogen		
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man		
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen		

RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
GEN	MAK	Germ Cell Mutagen 3a
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Australia	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
EYE	GHS - New Zealand	Eye irritation category 2
CAN	GHS - New Zealand	Carcinogenicity category 2
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin sensitisation category 1
REP	GHS - New Zealand	Reproductive toxicity category 2
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
GEN	EU - Annex VI CMRs	Mutagen - Category 2
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
RES	GHS - Japan	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1A]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 1]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B

MOLYBDENUM		ID: 7439-98-7		
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-16 5:16:04		
%: 0.0000 - 0.0190	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]	
SKI	GHS - Japan		H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]	
REP	GHS - New Zealand		Reproductive toxicity category 2	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES:				

TIN					ID: 7440-31-5
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:04		
%: 0.0000 - 0.0190	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual	

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

SULFUR

ID: 7704-34-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-16 5:16:05	
%: 0.0000 - 0.0150	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
SKI	GHS - New Zealand	Skin irritation category 2		
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List		
		Antimicrobials		

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	Inherently non-emitting source per LEED	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2024-04-28 00:00:00	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: Metals (as well as coated metals) are inherently non-emitting sources of VOCs, as per LEED® v4.		

LCA	Environmental Product Declaration (EPD) by Tata Steel UK Limited	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2021-01-25 00:00:00	CERTIFIER OR LAB: Tata
APPLICABLE FACILITIES: Port Talbot, Llanwern, Shotton (UK), Dubai (UAE)	EXPIRY DATE: 2025-07-30 00:00:00	Steel UK Limited
CERTIFICATE URL:		
https://www.tatasteeleurope.com/construction/downloadcentre/environmental-product-declarations		
CERTIFICATION AND COMPLIANCE NOTES: EPDs for a range of ComFlor® products are available by request, and all these EPDs are third party verified to EN 15804 and ISO 14025 and issued through Tata Steel UK's EPD Programme.		

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.

CONCRETE, STEEL REINFORCING MESH AND STEEL STUDS
MANUFACTURER (OR GENERIC): Generic
HPD URL: No HPD available
ACCESSORY TYPE: Installation Accessory
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: ComFlor® products would usually be used with concrete, steel reinforcing mesh and steel studs.

Section 5: General Notes

This HPD covers Tata Steel's ComFlor® family of products, namely ComFlor® 46, ComFlor® 51, ComFlor® 51+, ComFlor® 60, ComFlor® E60, ComFlor® 80, ComFlor® 100, ComFlor® 210 and ComFlor® 225. The product numbers refer to the depth of the profile (in mm) and the products are available in four steel gauges (0.9mm, 1.0mm, 1.2mm and 1.25mm).

All steel manufactured by Tata Steel's European operations contains recycled steel. This is typically between 15% and 20% as an average across of our operations and consists of both pre- and post-consumer content.

MANUFACTURER INFORMATION

MANUFACTURER: **Tata Steel UK**
ADDRESS: **18 Grosvenor Place**
London, England SW1X 7HS
COUNTRY: **United Kingdom**

WEBSITE: **<https://www.tatasteeleurope.com/>**
CONTACT NAME: **Peter Quinn**
TITLE: **Director Sustainability & Environment**
PHONE: **+44 7793 170482**
EMAIL: **peter.quinn@tatasteeleurope.com**

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-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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

