ASC Steel Deck
by ASC Profiles

Health Product Declaration v2.1

CLASSIFICATION: 05 31 00

created via: HPDC Online Builder

PRODUCT DESCRIPTION: ASC Steel Deck decking profiles (all) - Structural steel deck is used in roof and floor applications. Steel Deck is available in a variety of depths, widths and rib-spacings based on customer requirements. Product options include the application of a primer for field paint application ease. Product accessories include the use of insulation batts in cellular deck to improve acoustical performance.

Section 1: Summary

Nested Method / Material Threshold

CONTENT INVENTORY

Inventory Reporting Format
- (•) Nested Materials Method
- ( ) Basic Method

Threshold Disclosed Per
- (•) Material
- ( ) Product

Threshold level
- (•) 100 ppm
- ( ) 1,000 ppm
- ( ) Per GHS SDS
- ( ) Per OSHA MSDS
- ( ) Other

Residuals/Impurities
Residuals/Impurities Considered in 1 of 2 Materials

Explanation(s) provided for Residuals/Impurities?
- (•) Yes
- ( ) No

Are All Substances Above the Threshold Indicated:

Characterized
Percent Weight and Role Provided?
- (•) Yes
- ( ) No

Screened
Using Priority Hazard Lists with Results Disclosed?
- (•) Yes
- ( ) No

Identified
Name and Identifier Provided?
- (•) Yes
- ( ) No

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

BASE STEEL [IRON LT-P1 | END MANGANESE LT-P1 | END | MUL | REP CARBON LT-UNK PHOSPHORUS BM-2 | AQU | MAM | PHY ALUMINUM LT-P1 | RES | END | PHY SULFUR LT-UNK | SKI SILICON LT-UNK] ZINC METALLIC COATING [ZINC LT-P1 | AQU | MUL | END | PHY ALUMINUM LT-P1 | RES | END | PHY IRON LT-P1 | END]

Number of Greenscreen BM-4/BM3 contents..... 0
Contents highest concern GreenScreen Benchmark or List translator Score..... LT-P1
Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

See Section 3 for additional listings.

No certifications have been added to this HPD.

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?
- (•) Yes
- ( ) No

PREPARER: Self-Prepared
VERIFIER: SCS Global Services
VERIFICATION #: qGE-2479

SCREENING DATE: 2017-12-14
PUBLISHED DATE: 2018-01-19
EXPIRY DATE: 2020-12-14

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 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

BASE STEEL

%: 95.6500 - 99.1600 **HPD URL:**

MATERIAL THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Guidance for considering, identifying and quantifying residuals is in pilot test phase. Residuals will be considered and updated once a guideline is finalized. Vanadium and/or Columbium may be present as residuals in steel below the inventory reporting threshold of 100ppm. Residuals that might be present above 100ppm are Copper (0.1540% max), Nickel (0.1000% max), Chromium (0.1340% max), Tin (0.0500% max), Molybdenium (0.0500% max), and Titanium (0.0100% max).

OTHER MATERIAL NOTES: The weight contribution of the base steel will vary depending on the thickness of the steel and they weight of the zinc metallic coating. See Section 5 for additional details.

IRON

ID: **7439-89-6**

%: **98.1400 - 99.8300** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Physical Structure**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

MANGANESE

ID: **7439-96-5**

%: **0.1500 - 1.2000** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Physical Structure**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

CARBON

ID: **7440-44-0**

%: **0.0200 - 0.2400** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Physical Structure**

HAZARDS:	AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

PHOSPHORUS

ID: **7723-14-0**

%: **0.0000 - 0.0300** GS: **BM-2** RC: **UNK** NANO: **No** ROLE: **Physical Structure**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ACUTE AQUATIC	EU - R-phrases	R52 - Harmful to Aquatic Organisms
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades. Priority List of Hazardous Substances (rank 19)

ALUMINUM

ID: **7429-90-5**

%: **0.0000 - 0.1000** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Physical Structure**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades. The Priority List of Hazardous Substances (rank 179)

SULFUR

ID: **7704-34-9**

%: **0.0000 - 0.0400** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Physical Structure**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN IRRITATION	EU - R-phrases	R38 - Irritating to skin
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

SILICON

ID: **7440-21-3**

%: **0.0000 - 0.2540** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Physical Structure**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

ZINC METALLIC COATING

%: 0.8400 - 4.3500 **HPD URL:**

MATERIAL THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Guidance for considering, identifying and quantifying residuals is in pilot test phase. Residuals will be considered and updated once a guideline is finalized.

OTHER MATERIAL NOTES: Zinc alloy applied by the hot dip galvanization process per the latest version of ASTM A653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process. The weight contribution of the zinc metallic coating will vary depending on thickness of the base steel and the coating weight of zinc applied. See Section 5 for additional details.

ZINC

ID: **7440-66-6**

%: **99.2000 - 99.5000** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Corrosion Protection**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ACUTE AQUATIC	EU - R-phrases	R50 - Very Toxic to Aquatic Organisms
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: Priority List of Hazardous Substances (rank 75).

ALUMINUM

ID: **7429-90-5**

%: **0.1000 - 0.5000** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Adhesion Promoter**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases

SUBSTANCE NOTES: Priority List of Hazardous Substances (rank 179).

IRON ID: **7439-89-6**

%: **0.0000 - 0.0200** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Metal Alloy**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: By product of the galvanization process.

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.

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.

FIBER GLASS INSULATION

HPD URL:
https://www.pharosproject.net/material/show/2001265

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Fiber Board insulation from Knauf insulation can be added to cellular flutes of structural deck at point of manufacture. This improves the acoustical properties of the installed product. Product with insulation is called 'Acustadek' or Acoustical Deck.

DECK PRIMER

HPD URL: **No HPD link provided**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
White or gray water-based primer available as specified by customer. When ordered with primer product is referred to as Primeshield. See Section 5 General Notes for more detail.

Section 5: General Notes

Deck Primer is a product option but weight max in finished Steel Deck is 0.0099%. The weight contribution of steel and metallic coating to the finished product will vary based on the gauge (thickness) of the base steel and weight of the metallic coating. All figures referenced in this guide reflect 22 gauge material and a G90 coating (a combination of 95.65% steel and 4.35% metallic coating). This represents the lightest standard offer base steel and heaviest metallic coating combination. All metallic coated steel deck has a contribution ratio of steel between 96.65% -99.16% and a metallic coating range of 4.35%-0.84%. Prime shield (primer painted) or 'Cold Rolled' steel deck does not have a metallic coating and steel will represent 100% of product weight.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **ASC Profiles**
ADDRESS: **2110 Enterprise Blvd**
West Sacramento CA 95691, US
WEBSITE: **www.ascprofiles.com**

CONTACT NAME: **Michelle Vondran**
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KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classi cation and Labeling of Chemicals Safety Data Sheet

Hazard Types

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspeci ed (insu cient data to benchmark)
LT-P1 List Translator Possible Benchmark 1
LT-1 List Translator Likely Benchmark 1
LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

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 produc

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

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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.