

CLASSIFICATION: 05 50 00

PRODUCT DESCRIPTION: HEX NUTS ASTM A194 GRADE 2H DIAMETERS RANGE FROM 1/2 IN UP TO 4 IN. EN

ESPAÑOL: TUERCAS HEXAGONALES ASTM A194 GRADO 2H DE DIÁMETROS DESDE 1/2 IN Y HASTA 4 IN

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

Residuals/Impurities

Residuals/Impurities  
Considered in 5 of 5 Materials

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

All Substances Above the Threshold Indicated Are:

Characterized  Yes Ex/SC  Yes  No  
% weight and role provided for all substances.

Screened  Yes Ex/SC  Yes  No  
All substances screened using Priority Hazard Lists with  
results disclosed.

Identified  Yes Ex/SC  Yes  No  
All substances disclosed by Name (Specific or Generic) and  
Identifier.

Threshold Disclosed Per

- Material
- Product

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

IRON [ IRON LT-P1 | END ] MANGANESO [ MAGNESIUM LT-UNK | PHY ]  
CARBON [ GRAPHITE LT-UNK AMORPHOUS SILICA LT-P1 | CAN IRON LT-  
P1 | END ] SULFUR [ SULFUR, ELEMENTAL LT-UNK | SKI ARSENIC,  
INORGANIC LT-1 | DEL | CAN | PBT | AQU | MAM | END | MUL | GEN ]  
PHOSPHORUS [ PHOSPHORUS BM-2 | PHY | MAM ALUMINUM LT-P1 | RES  
| PHY | END ARSENIC, INORGANIC LT-1 | DEL | CAN | PBT | AQU | MAM |  
END | MUL | GEN BORON LT-UNK CALCIUM LT-P1 | PHY ]

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

Contents highest concern GreenScreen  
Benchmark or List translator Score ... LT-1  
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.

VOC emissions: Self Declared Nonemitting Material  
Multi-attribute: Type III Environmental Product Declaration (EPD)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2019-01-02

PUBLISHED DATE: 2019-01-04

EXPIRY DATE: 2022-01-02



## 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](http://www.hpd-collaborative.org/hpd-2-1-standard)

### IRON

#: 98.5100 - 98.8800

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database: <https://toxnet.nlm.nih.gov/>.

OTHER MATERIAL NOTES:

### IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

#: 98.5100 - 98.8800

GS: LT-P1

RC: Both

NANO: No

ROLE: Base metal

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: This material contains a 33-40% recycled content- 18-20% post-consumer and 15-20% postindustrial.

### MANGANESO

#: 0.6000 - 0.9000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database: <https://toxnet.nlm.nih.gov/>.

OTHER MATERIAL NOTES: COMMERCIAL MAGNESIUM IS ABOUT 99.9% PURE

### MAGNESIUM

ID: 7439-95-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

#: 0.6000 - 0.9000

GS: LT-UNK

RC: Both

NANO: No

ROLE: alloying element

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

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

**CARBON**

%: 0.4300 - 0.5000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database: <https://toxnet.nlm.nih.gov/>.

OTHER MATERIAL NOTES:

**GRAPHITE**

ID: 7440-44-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

%: 0.4300 - 0.5000

GS: LT-UNK

RC: Both

NANO: No

ROLE: Alloying element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	No hazards found	

SUBSTANCE NOTES: This material contains a 33-40% recycled content- 18-20% post-consumer and 15-20% postindustrial.

**AMORPHOUS SILICA**

ID: 7631-86-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

%: Impurity/Residual

GS: LT-P1

RC: UNK

NANO: No

ROLE: Impurity/Residual

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation

SUBSTANCE NOTES:

**IRON**

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

%: Impurity/Residual

GS: LT-P1

RC: UNK

NANO: No

ROLE: Impurity/Residual

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

SUBSTANCE NOTES:

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database: <https://toxnet.nlm.nih.gov/>.

OTHER MATERIAL NOTES:

**SULFUR, ELEMENTAL**

ID: 7704-34-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

%: 0.0500 - 0.0500

GS: LT-UNK

RC: Both

NANO: No

ROLE: Alloying element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation

SUBSTANCE NOTES: This material contains a 33-40% recycled content- 18-20% post-consumer and 15-20% postindustrial.

**ARSENIC, INORGANIC**

ID: 7440-38-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

%: Impurity/Residual

GS: LT-1

RC: UNK

NANO: No

ROLE: Impurity/Residual

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CANCER	US EPA - IRIS Carcinogens	(1986) Group A - Human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens

CANCER	Japan - GHS	Carcinogenicity - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES:

## PHOSPHORUS

%: 0.0400 - 0.0400

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database: <https://toxnet.nlm.nih.gov/>.

OTHER MATERIAL NOTES:

## PHOSPHORUS

ID: 7723-14-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

%: 0.0400 - 0.0400

GS: BM-2

RC: Both

NANO: No

ROLE: Alloying element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances

SUBSTANCE NOTES: This material contains a 33-40% recycled content- 18-20% post-consumer and 15-20% postindustrial.

## ALUMINUM

ID: 7429-90-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-02

%: Impurity/Residual

GS: LT-P1

RC: UNK

NANO: No

ROLE: Impurity/Residual

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
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
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES:

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-01-02**

#: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CANCER	US EPA - IRIS Carcinogens	(1986) Group A - Human Carcinogen
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
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
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES:

**BORON**

ID: 7440-42-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-01-02**

#: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	No hazards found	

SUBSTANCE NOTES:

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-01-02**

#: **Impurity/Residual**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Impurity/Residual**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**PHYSICAL HAZARD (REACTIVE)**

**EU - GHS (H-Statements)**

**H261 - In contact with water releases flammable gases**

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

### Self Declared Nonemitting Material

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **0001-**

EXPIRY DATE:

CERTIFIER OR LAB: **Self Declared**

APPLICABLE FACILITIES: **Lerma, Mexico**

**02-20**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **This material is considered nonemitting for VOCs.**

### MULTI-ATTRIBUTE

### Type III Environmental Product Declaration (EPD)

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2018-**

EXPIRY DATE: **2023-**

CERTIFIER OR LAB: **Ecogamut**

APPLICABLE FACILITIES: **Lerma, Mexico**

**07-21**

**07-21**

**Consulting Inc.**

CERTIFICATE URL:

<https://www.epdregistracion.com.mx/auge-industrial/>

CERTIFICATION AND COMPLIANCE NOTES: **The functional unit is: 1 kg of anchor bolt component, including bolt 4140, hex 2H nut, F436 washer, and A572 grade 50 plate.**

## 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

All residuals and impurities were screened and impurities noted. This material contains a 33-40% recycled content-18-20% post-consumer and 15-20% postindustrial.





## MANUFACTURER INFORMATION

MANUFACTURER: **INDUSTRIAS AUGÉ SA DE CV**  
 ADDRESS: **Parque Industrial El Cerrillo Lote 9**  
**Jerma Estado de México 52000, Mexico**  
 WEBSITE: **www.auge.com**

CONTACT NAME: **Veronica Alejo**  
 TITLE: **Assistant**  
 PHONE: **+52 (01) 728 2851-762 ext. 2251**  
 EMAIL: **veronica.alejo@auge.com**

## KEY

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

### Hazard Types

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

### GreenScreen (GS)

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

### 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 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.*