

CLASSIFICATION: 08 30 00 Specialty Doors and Frames

PRODUCT DESCRIPTION: E119 Fire Resistive Frame by ASSA ABLOY is an engineered steel window or door frame that provides a fire-resistive or fire protective framing solution with complete design flexibility. Frames are custom sized according to building specifications, including a steel profile, coating, and gasket for the glazing.

Section 1: Summary

Nested Method / Product 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 7 of 10 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
One or more substances not screened using Priority Hazard Lists with results disclosed and/ or one or more Special Condition did not follow guidance.

Identified Yes Ex/SC Yes No
One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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 [IRON LT-P1 | END CARBON LT-UNK MANGANESE LT-P1 | END | MUL | REP SILICON LT-UNK PHOSPHORUS BM-2 | PHY | MAM SULFUR LT-UNK | SKI NITROGEN NoGS 3003-H14 ALUMINUM LT-P1 | RES | PHY | END TITANIUM LT-UNK CHROMIUM LT-P1 | RES | END | SKI NICKEL LT-1 | RES | CAN | SKI | MAM | MUL COPPER LT-UNK NIOBIUM LT-UNK BORON LT-UNK VANADIUM LT-1 | MUL | CAN | GEN MOLYBDENUM LT-UNK] GASKET 1 [NEOPRENE LT-UNK ALUMINA TRIHYDRATE BM-2 | RES CHLORINATED PARAFFIN WAXES – GENERIC LT-P1 | PBT | END | AQU | CAN CARBON BLACK LT-1 | CAN ZINC OXIDE BM-1 | RES | AQU | MUL ANTIMONY TRIOXIDE BM-1 | CAN | MUL 2-THIAZOLIDINETHIONE, 3-METHYL- NoGS] STEEL BEAD [IRON LT-P1 | END COPPER LT-UNK NITROGEN NoGS VANADIUM LT-1 | MUL | CAN | GEN TITANIUM LT-UNK CHROMIUM LT-P1 | RES | END | SKI NICKEL LT-1 | RES | CAN | SKI | MAM | MUL 3003-H14 ALUMINUM LT-P1 | RES | PHY | END CARBON LT-UNK SILICON LT-UNK MANGANESE LT-P1 | END | MUL | REP PHOSPHORUS BM-2 | PHY | MAM SULFUR LT-UNK | SKI] HOT DIPPED GALVANIZED STEEL [IRON LT-P1 | END CARBON LT-UNK SILICON LT-UNK MANGANESE LT-P1 | END | MUL | REP PHOSPHORUS BM-2 | PHY | MAM SULFUR LT-UNK | SKI COPPER LT-UNK 3003-H14 ALUMINUM LT-P1 | RES | PHY | END NITROGEN NoGS VANADIUM LT-1 | MUL | CAN | GEN TITANIUM LT-UNK CHROMIUM LT-P1 | RES | END | SKI NICKEL LT-1 | RES | CAN | SKI | MAM | MUL] WELDING WIRE [IRON LT-P1 | END CHROMIUM LT-P1 | RES | END | SKI COPPER LT-UNK MANGANESE LT-P1 | END | MUL | REP CARBON LT-UNK MOLYBDENUM LT-UNK VANADIUM LT-1 | MUL | CAN | GEN TITANIUM LT-UNK NICKEL LT-1 | RES | CAN | SKI | MAM | MUL SILICON LT-UNK] STAINLESS STEEL [IRON LT-P1 | END CARBON LT-UNK SILICON LT-UNK MANGANESE LT-P1 | END | MUL | REP

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:

Manufacturer has opted for the nested content inventory display - materials list percentages present in the final product and substances list percentages present in their respective material. All substances have been disclosed to at least 1,000 ppm of their respective material. Proprietary substances were disclosed by the suppliers with percentages, roles and hazards provided and entered accordingly. Not all substance name and identifiers are disclosed due to their proprietary nature to the supplier or manufacturer, however all substances are screened with their hazards reported.

PHOSPHORUS BM-2 | PHY | MAM SULFUR LT-UNK | SKI CHROMIUM LT-
P1 | RES | END | SKI NICKEL LT-1 | RES | CAN | SKI | MAM | MUL NITROGEN
NoGS] PUTTY [UNKNOWN Not Screened STYRENE BM-1 | RES | CAN |
END | SKI | EYE | DEL | MAM | MUL | REP TITANIUM DIOXIDE LT-1 | CAN |
END TRIZINC BIS(ORTHOPHOSPHATE) LT-P1 | AQU | MUL 1,2,3,6-
TETRAHYDROPHTHALIC ACID ANHYDRIDE LT-UNK | SKI | EYE | RES]
PAINT PRIMER [UNKNOWN Not Screened TITANIUM DIOXIDE LT-1 | CAN |
END BUTYL ACETATE LT-UNK METHYL N-AMYL KETONE BM-U ZINC
OXIDE BM-1 | RES | AQU | MUL] PAINT CATALYST [HEXAMETHYLENE
DIISOCYANATE HOMOPOLYMER (HDI HOMOPOLYMER) LT-P1 BUTYL
ACETATE LT-UNK 1,6-HEXAMETHYLENE DIISOCYANATE LT-UNK | RES |
SKI | EYE | MAM] PAINT TOP COAT [TITANIUM DIOXIDE LT-1 | CAN | END
UNKNOWN Not Screened CYCLOHEXANONE LT-P1 | END | CAN BUTYL
ACETATE LT-UNK METHYL ETHYL KETONE LT-P1 | PHY | EYE | END
TOLUENE LT-1 | DEL | REP | PHY | MAM | SKI | END | MUL XYLENES BM-1 |
SKI | END | MUL | REP ETHYLBENZENE BM-2 | CAN | PHY | MAM | SKI | REP
]

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: N/A

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2019-02-25

PUBLISHED DATE: 2019-02-25

EXPIRY DATE: 2022-02-25



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

HOT ROLLED STEEL

#: 34.9500

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were investigated for this material, however based on supplier documentation it was confirmed that no residuals or impurities are present above 1,000 ppm of the product.

OTHER MATERIAL NOTES:

IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 99.4330 - 100.0000

GS: LT-P1

RC: UNK

NANO: No

ROLE: Alloy ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Substance ranges based on alloy composition.

CARBON

ID: 7440-44-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 0.0000 - 0.0660

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Alloy ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: Substance ranges based on alloy composition.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 0.0000 - 0.3300

GS: LT-P1

RC: UNK

NANO: No

ROLE: Alloy ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	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: Substance ranges based on alloy composition.

SILICON

ID: 7440-21-3

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0120**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES: Substance ranges based on alloy composition.

PHOSPHORUS

ID: 7723-14-0

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0130**

GS: **BM-2**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

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: Substance ranges based on alloy composition.

SULFUR

ID: 7704-34-9

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0060**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

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

SUBSTANCE NOTES: Substance ranges based on alloy composition.

NITROGEN

ID: 7727-37-9

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0360**

GS: **NoGS**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: **Substance ranges based on alloy composition.**

3003-H14 ALUMINUM

ID: 7429-90-5

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0320**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

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: **Substance ranges based on alloy composition.**

TITANIUM

ID: 7440-32-6

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0250**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: **Substance ranges based on alloy composition.**

CHROMIUM

ID: 7440-47-3

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0270**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Substance ranges based on alloy composition.

NICKEL

ID: 7440-02-0

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0290**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2B - Possibly 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
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Substance ranges based on alloy composition.

COPPER

ID: 7440-50-8

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0260**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		
SUBSTANCE NOTES: Substance ranges based on alloy composition.		

NIOBIUM

ID: 7440-03-1

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		
HAZARD SCREENING DATE: 2019-02-25		
%: 0.0000 - 0.0001	GS: LT-UNK	RC: UNK NANO: No ROLE: Alloy ingredient
HAZARD TYPE		
AGENCY AND LIST TITLES		
WARNINGS		
No hazards found		
SUBSTANCE NOTES: Substance ranges based on alloy composition.		

BORON

ID: 7440-42-8

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		
HAZARD SCREENING DATE: 2019-02-25		
%: 0.0000 - 0.0001	GS: LT-UNK	RC: UNK NANO: No ROLE: Alloy ingredient
HAZARD TYPE		
AGENCY AND LIST TITLES		
WARNINGS		
No hazards found		
SUBSTANCE NOTES: Substance ranges based on alloy composition.		

VANADIUM

ID: 7440-62-2

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		
HAZARD SCREENING DATE: 2019-02-25		
%: 0.0000 - 0.0010	GS: LT-1	RC: UNK NANO: No ROLE: Alloy ingredient
HAZARD TYPE		
AGENCY AND LIST TITLES		
WARNINGS		
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GENE MUTATION	MAK	Germ Cell Mutagen 2
SUBSTANCE NOTES: Substance ranges based on alloy composition.		

MOLYBDENUM

ID: 7439-98-7

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		
HAZARD SCREENING DATE: 2019-02-25		

#: 0.0000 - 0.0040

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Alloy ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: Substance ranges based on alloy composition.

GASKET 1

#: 20.3700

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were investigated for this material, however based on supplier documentation it was confirmed that no residuals or impurities are present above 1,000 ppm of the product.

OTHER MATERIAL NOTES:

NEOPRENE

ID: 9010-98-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 40.0000 - 50.0000

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Polymer

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

ALUMINA TRIHYDRATE

ID: 21645-51-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 35.0000 - 45.0000

GS: BM-2

RC: UNK

NANO: No

ROLE: Fire Resistant Filler

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagens (Rs) - sensitizer-induced

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

CHLORINATED PARAFFIN WAXES – GENERIC

ID: 63449-39-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 5.0000 - 10.0000

GS: LT-P1

RC: UNK

NANO: No

ROLE: Fire Resistant Filler

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Substance of Possible Concern
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)
ENDOCRINE	ChemSec - SIN List	Endocrine Disruption
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CHRON AQUATIC	US EPA - PPT Chemical Action Plans	Highly toxic to aquatic organisms
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

CARBON BLACK

ID: 1333-86-4

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

HAZARD SCREENING DATE: **2019-02-25**

#: **2.0000 - 8.0000**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

ZINC OXIDE

ID: 1314-13-2

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

HAZARD SCREENING DATE: **2019-02-25**

#: **1.0000 - 3.0000**

GS: **BM-1**

RC: **UNK**

NANO: **No**

ROLE: **Curing Agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
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

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

ANTIMONY TRIOXIDE

ID: 1309-64-4

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

HAZARD SCREENING DATE: **2019-02-25**

#: **1.0000 - 2.5000** GS: **BM-1** RC: **UNK** NANO: **No** ROLE: **Fire Resistant Additive**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2B - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CANCER	Japan - GHS	Carcinogenicity - Category 1B

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

2-THIAZOLIDINETHIONE, 3-METHYL-

ID: 1908-87-8

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.5000 - 2.0000** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Accelerator for Curing**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	No hazards found	

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

STEEL BEAD

#: **14.4200**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were investigated for this material, however based on supplier documentation it was confirmed that no residuals or impurities are present above 1,000 ppm of the product.

OTHER MATERIAL NOTES:

IRON

ID: 7439-89-6

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

HAZARD SCREENING DATE: **2019-02-25**

#: **99.6120 - 100.0000** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

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

SUBSTANCE NOTES: Substance ranges based on alloy composition

COPPER

ID: 7440-50-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0216** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES: Substance ranges based on alloy composition

NITROGEN

ID: 7727-37-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0030** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES: Substance ranges based on alloy composition

VANADIUM

ID: 7440-62-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0012** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GENE MUTATION	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Substance ranges based on alloy composition

TITANIUM

ID: 7440-32-6

#: **0.0000 - 0.0008** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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No hazards found

SUBSTANCE NOTES: **Substance ranges based on alloy composition.**

CHROMIUM

ID: **7440-47-3**

#: **0.0000 - 0.0246** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: **Substance ranges based on alloy composition.**

NICKEL

ID: **7440-02-0**

#: **0.0000 - 0.0209** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2B - Possibly 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
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Substance ranges based on alloy composition.

3003-H14 ALUMINUM

ID: 7429-90-5

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

HAZARD SCREENING DATE: **2019-02-25**

?: **0.0000 - 0.0312**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

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: Substance ranges based on alloy composition.

CARBON

ID: 7440-44-0

%: **0.0000 - 0.0429**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: **Substance ranges based on alloy composition****SILICON**ID: **7440-21-3**%: **0.0000 - 0.0074**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: **Substance ranges based on alloy composition****MANGANESE**ID: **7439-96-5**%: **0.0000 - 0.2159**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

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: **Substance ranges based on alloy composition****PHOSPHORUS**ID: **7723-14-0**%: **0.0000 - 0.0104**GS: **BM-2**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

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: **Substance ranges based on alloy composition**

SULFUR

ID: 7704-34-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 0.0077**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

SKIN IRRITATION**EU - GHS (H-Statements)****H315 - Causes skin irritation**SUBSTANCE NOTES: **Substance ranges based on alloy composition****HOT DIPPED GALVANIZED STEEL**%: **13.1700**PRODUCT THRESHOLD: **1000 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **Yes**RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities were investigated for this material, however based on supplier documentation it was confirmed that no residuals or impurities are present above 1,000 ppm of the product.**

OTHER MATERIAL NOTES:

IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **99.6120 - 100.0000**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE**TEDX - Potential Endocrine Disruptors****Potential Endocrine Disruptor**SUBSTANCE NOTES: **Substance ranges based on alloy composition.****CARBON**

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 0.0430**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards foundSUBSTANCE NOTES: **Substance ranges based on alloy composition.****SILICON**

ID: 7440-21-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**

#: 0.0000 - 0.0070

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Alloy ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: Substance ranges based on alloy composition.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 0.0000 - 0.2160

GS: LT-P1

RC: UNK

NANO: No

ROLE: Alloy ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

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: Substance ranges based on alloy composition.

PHOSPHORUS

ID: 7723-14-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 0.0000 - 0.0100

GS: BM-2

RC: UNK

NANO: No

ROLE: Alloy ingredient

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: Substance ranges based on alloy composition.

SULFUR

ID: 7704-34-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 0.0000 - 0.0080

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Alloy ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

SKIN IRRITATION

EU - GHS (H-Statements)

H315 - Causes skin irritation

SUBSTANCE NOTES: Substance ranges based on alloy composition.

COPPER

ID: 7440-50-8

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0220** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES: **Substance ranges based on alloy composition.**

3003-H14 ALUMINUM

ID: 7429-90-5

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0310** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

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: **Substance ranges based on alloy composition.**

NITROGEN

ID: 7727-37-9

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0030** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES: **Substance ranges based on alloy composition.**

VANADIUM

ID: 7440-62-2

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0010** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
GENE MUTATION	MAK	Germ Cell Mutagen 2

SUBSTANCE NOTES: Substance ranges based on alloy composition.

TITANIUM

ID: 7440-32-6

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0010**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES: Substance ranges based on alloy composition.

CHROMIUM

ID: 7440-47-3

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0250**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Substance ranges based on alloy composition.

NICKEL

ID: 7440-02-0

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0210**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2B - Possibly 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
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Substance ranges based on alloy composition.

WELDING WIRE

%: 9.8600

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were investigated for this material, however based on supplier documentation it was confirmed that no residuals or impurities are present above 1,000 ppm of the product.

OTHER MATERIAL NOTES:

IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

%: 80.0000 - 100.0000

GS: LT-P1

RC: UNK

NANO: No

ROLE: Welding wire ingredient

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

SUBSTANCE NOTES: Substance ranges based on alloy composition.

CHROMIUM

ID: 7440-47-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 10.0000**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: **Substance ranges based on alloy composition.****COPPER**

ID: 7440-50-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 1.0000**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES: **Substance ranges based on alloy composition.****MANGANESE**

ID: 7439-96-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 3.0000**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	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: **Substance ranges based on alloy composition.****CARBON**

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 1.5000**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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No hazards found

SUBSTANCE NOTES: Substance ranges based on alloy composition.

MOLYBDENUM

ID: 7439-98-7

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 4.0000**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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No hazards found

SUBSTANCE NOTES: Substance ranges based on alloy composition.

VANADIUM

ID: 7440-62-2

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 1.0000**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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MULTIPLE

German FEA - Substances Hazardous to Waters

Class 3 - Severe Hazard to Waters

CANCER

MAK

Carcinogen Group 2 - Considered to be carcinogenic for man

GENE MUTATION

MAK

Germ Cell Mutagen 2

SUBSTANCE NOTES: Substance ranges based on alloy composition.

TITANIUM

ID: 7440-32-6

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 1.0000**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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No hazards found

SUBSTANCE NOTES: Substance ranges based on alloy composition.

NICKEL

ID: 7440-02-0

%: **0.0000 - 3.0000**GS: **LT-1**RC: **UNK**NANO: **No**ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagens (Rs) - sensitizer-induced
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2B - Possibly 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
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: **Substance ranges based on alloy composition.****SILICON**ID: **7440-21-3**%: **0.0000 - 1.0000**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Welding wire ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	No hazards found	

SUBSTANCE NOTES: **Substance ranges based on alloy composition.****STAINLESS STEEL**%: **2.5300**PRODUCT THRESHOLD: **1000 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **Yes**RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities were investigated for this material, however based on supplier documentation it was confirmed that no residuals or impurities are present above 1,000 ppm of the product.**

IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **67.1170 - 100.0000**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE**TEDX - Potential Endocrine Disruptors****Potential Endocrine Disruptor**SUBSTANCE NOTES: **Substance ranges based on alloy composition.****CARBON**

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 0.0400**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: **Substance ranges based on alloy composition.****SILICON**

ID: 7440-21-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 0.5000**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: **Substance ranges based on alloy composition.****MANGANESE**

ID: 7439-96-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **0.0000 - 1.2100**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Alloy ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

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: Substance ranges based on alloy composition.

PHOSPHORUS

ID: 7723-14-0

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0320** GS: **BM-2** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

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: Substance ranges based on alloy composition.

SULFUR

ID: 7704-34-9

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 0.0010** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

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

SUBSTANCE NOTES: Substance ranges based on alloy composition.

CHROMIUM

ID: 7440-47-3

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 18.2000** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Substance ranges based on alloy composition.

NICKEL

ID: 7440-02-0

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 8.1000** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2B - Possibly 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
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Substance ranges based on alloy composition.

NITROGEN

ID: 7727-37-9

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.0000 - 4.8000**

GS: **NoGS**

RC: **UNK**

NANO: **No**

ROLE: **Alloy ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
	No hazards found	

SUBSTANCE NOTES: Substance ranges based on alloy composition.

PUTTY

#: **0.1800**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities were not considered as not all substances in this material are screened down to 1,000 ppm.**

OTHER MATERIAL NOTES:

UNKNOWNID: **Unknown**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **62.0000 - 88.0000** GS: **Not Screened** RC: **UNK** NANO: **No** ROLE: **Putty ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES: **Substances not required to be reported on SDS and considered proprietary to supplier. Substance ranges based on supplier documentation.****STYRENE**ID: **100-42-5**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**%: **10.0000 - 30.0000** GS: **BM-1** RC: **UNK** NANO: **No** ROLE: **Putty ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

CANCER

IARC

Group 2A - Agent is probably Carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen

ENDOCRINE

EU - Priority Endocrine Disruptors

Category 1 - In vivo evidence of Endocrine Disruption Activity

CANCER

US NIH - Report on Carcinogens

Reasonably Anticipated to be Human Carcinogen

SKIN IRRITATION

EU - GHS (H-Statements)

H315 - Causes skin irritation

EYE IRRITATION

EU - GHS (H-Statements)

H319 - Causes serious eye irritation

DEVELOPMENTAL

EU - GHS (H-Statements)

H361d - Suspected of damaging the unborn child

ORGAN TOXICANT

EU - GHS (H-Statements)

H372 - Causes damage to organs through prolonged or repeated exposure

ENDOCRINE

ChemSec - SIN List

Endocrine Disruption

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

CANCER

MAK

Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: **Substance ranges based on supplier documentation.****TITANIUM DIOXIDE**ID: **13463-67-7**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-02-25**

#: 1.0000 - 5.0000

GS: LT-1

RC: UNK

NANO: No

ROLE: Putty ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

TRIZINC BIS(ORTHOPHOSPHATE)

ID: 7779-90-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 0.5000 - 1.5000

GS: LT-P1

RC: UNK

NANO: No

ROLE: Putty ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

1,2,3,6-TETRAHYDROPHTHALIC ACID ANHYDRIDE

ID: 85-43-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 0.5000 - 1.5000

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Putty ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

SUBSTANCE NOTES: Substance ranges based on supplier documentation.

PAINT PRIMER

%: 0.0000 - 4.5100

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities were not considered as not all substances in this material are screened down to 1,000 ppm.**

OTHER MATERIAL NOTES:

UNKNOWN

ID: **Unknown**

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

HAZARD SCREENING DATE: **2019-02-25**

%: 49.9800 **GS: Not Screened** **RC: None** **NANO: No** **ROLE: Primer ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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Hazard Screening not performed

SUBSTANCE NOTES: **Substances not required to be reported on SDS and considered proprietary to supplier.**

TITANIUM DIOXIDE

ID: **13463-67-7**

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

HAZARD SCREENING DATE: **2019-02-25**

%: 20.6200 **GS: LT-1** **RC: UNK** **NANO: No** **ROLE: Primer ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
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CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
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ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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CANCER	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
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CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
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SUBSTANCE NOTES:

BUTYL ACETATE

ID: **123-86-4**

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

HAZARD SCREENING DATE: **2019-02-25**

%: 18.4600 **GS: LT-UNK** **RC: UNK** **NANO: No** **ROLE: Primer ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES:

METHYL N-AMYL KETONE

ID: 110-43-0

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

HAZARD SCREENING DATE: **2019-02-25**

#: **8.4000**

GS: **BM-U**

RC: **UNK**

NANO: **No**

ROLE: **Primer ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES:

ZINC OXIDE

ID: 1314-13-2

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

HAZARD SCREENING DATE: **2019-02-25**

#: **2.5400**

GS: **BM-1**

RC: **UNK**

NANO: **No**

ROLE: **Primer ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

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

SUBSTANCE NOTES:

PAINT CATALYST

#: **0.0000 - 4.5100**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities were investigated for this material, however based on supplier documentation it was confirmed that no residuals or impurities are present above 1,000 ppm of the product.**

OTHER MATERIAL NOTES:

HEXAMETHYLENE DIISOCYANATE HOMOPOLYMER (HDI HOMOPOLYMER)

ID: 28182-81-2

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

HAZARD SCREENING DATE: **2019-02-25**

#: **74.7000** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Catalyst ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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No hazards found

SUBSTANCE NOTES:

BUTYL ACETATE

ID: 123-86-4

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

HAZARD SCREENING DATE: **2019-02-25**

#: **25.0000** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Catalyst ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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No hazards found

SUBSTANCE NOTES:

1,6-HEXAMETHYLENE DIISOCYANATE

ID: 822-06-0

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.3000** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Catalyst ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
RESPIRATORY	EU - GHS (H-Statements)	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES:

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were not considered as not all substances in this material are screened down to 1,000 ppm.

OTHER MATERIAL NOTES:

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 29.9500 GS: LT-1 RC: UNK NANO: No ROLE: Top coat ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES:

UNKNOWN

ID: Unknown

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 25.3200 GS: Not Screened RC: UNK NANO: No ROLE: Top coat ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
		Hazard Screening not performed

SUBSTANCE NOTES: Substances not required to be reported on SDS and considered proprietary to supplier.

CYCLOHEXANONE

ID: 108-94-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-02-25

#: 19.5100 GS: LT-P1 RC: UNK NANO: No ROLE: Top coat ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES:

BUTYL ACETATE

ID: **123-86-4**

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

HAZARD SCREENING DATE: **2019-02-25**

#: **11.4600** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Top coat ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
No hazards found		

SUBSTANCE NOTES:

METHYL ETHYL KETONE

ID: **78-93-3**

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

HAZARD SCREENING DATE: **2019-02-25**

#: **6.0300** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Top coat ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES:

TOLUENE

ID: **108-88-3**

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

HAZARD SCREENING DATE: **2019-02-25**

#: **4.4500** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Top coat ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
DEVELOPMENTAL	EU - GHS (H-Statements)	H361d - Suspected of damaging the unborn child
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 1A

SUBSTANCE NOTES:

XYLENES

ID: 1330-20-7

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

HAZARD SCREENING DATE: **2019-02-25**

#: **2.7900** GS: **BM-1** RC: **UNK** NANO: **No** ROLE: **Top coat ingredient**

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

ETHYLBENZENE

ID: 100-41-4

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

HAZARD SCREENING DATE: **2019-02-25**

#: **0.4900** GS: **BM-2** RC: **UNK** NANO: **No** ROLE: **Top coat ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2B - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B

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

N/A

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2018-**

EXPIRY DATE:

CERTIFIER OR LAB: **None**

APPLICABLE FACILITIES: **All**

01-01

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

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

This Health Product Declaration was prepared by Sustainable Solutions Corporation of Royersford, Pennsylvania on behalf of ASSA ABLOY Door Solutions.



MANUFACTURER INFORMATION

MANUFACTURER: **ASSA ABLOY**

ADDRESS: **110 Sargent Drive**

New Haven Connecticut 06511, USA

WEBSITE:

<https://www.assaabloydss.com/en/local/dss/>

CONTACT NAME: **Nelson Kraschel**

TITLE: **Product Manager**

PHONE: **641-494-2846**

EMAIL: **nelson.kraschel@assaabloy.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

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 Unspecified (insufficient 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 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.