Torsion
by KI

Health Product Declaration v2.1

CLASSIFICATION: 12 51 00

created via: HPDC Online Builder

PRODUCT DESCRIPTION: The Torsion® collection, designed by Giancarlo Piretti, offers superior comfort via flex back at a modest price. Torsion stack chairs provide the comfort of passive ergonomics at a price comparable to fixed-back stack chairs. Perfect for any application, Torsion stack chairs are available in three frame styles - full sled base, cantilevered sled base and straight four-leg.

Section 1: Summary

Basic 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
- ○ Considered
- ◉ Partially Considered
- ○ Not Considered

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

TORSION [STEEL (STEEL) NoGS ETHYLENE-PROPYLENE COPOLYMER (ETHYLENE-PROPYLENE COPOLYMER) LT-UNK NYLON 6 (NYLON 6) LT-UNK POLYESTER (POLYESTER) NoGS BARIUM SULFATE (BARIUM SULFATE) BM-2 | CAN ACRYLONITRILE -METHYL-METHACRYLATE -VINYLIDENE CHLORIDE COPOLYMER (ACRYLONITRILE -METHYL-METHACRYLATE -VINYLIDENE CHLORIDE COPOLYMER) LT-P1 | END 1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE (1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE) LT-UNK SORBITAN, TRI-9-OCTADECANOATE, POLY(OXY-1,2-ETHANEDIYL) DERIVS., EO 15 AND 20 MOL (SORBITAN, TRI-9-OCTADECANOATE, POLY(OXY-1,2-ETHANEDIYL) DERIVS., EO 15 AND 20 MOL) LT-UNK WHITE MINERAL OIL (WHITE MINERAL OIL) LT-UNK]

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:

Residuals were considered

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: SCS Indoor Advantage Gold
Multi-attribute: BIFMA Furniture Sustainability Level 2 (e3-2014)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?
- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2017-08-23
PUBLISHED DATE: 2017-08-23
EXPIRY DATE: 2020-08-23

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

TORSION

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Partially

RESIDUALS AND IMPURITIES NOTES: We collect data from our suppliers beyond SDS/MSDS. We request suppliers submit all chemicals down to 100 ppm.

OTHER PRODUCT NOTES:

STEEL (STEEL)

ID: **12597-69-2**

%: **63.3900** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Frame and hardware**

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

SUBSTANCE NOTES:

ETHYLENE-PROPYLENE COPOLYMER (ETHYLENE-PROPYLENE COPOLYMER)

ID: **9010-79-1**

%: **28.4500** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Seat and Back**

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

SUBSTANCE NOTES:

NYLON 6 (NYLON 6)

ID: **25038-54-4**

%: **5.6000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Spacers and flexarm**

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

SUBSTANCE NOTES:

POLYESTER (POLYESTER)

ID: **113669-95-7**

%: **0.5400** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Powder paint**

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

SUBSTANCE NOTES:

BARIUM SULFATE (BARIUM SULFATE)

ID: **7727-43-7**

%: **0.5300** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Powder paint**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES:

ACRYLONITRILE -METHYL-METHACRYLATE -VINYLIDENE CHLORIDE COPOLYMER (ACRYLONITRILE -METHYL-METHACRYLATE -VINYLIDENE CHLORIDE COPOLYMER)

ID: **25036-25-3**

%: **0.3800** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Powder paint**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	EU - Priority Endocrine Disrupters	Category 1 - In vivo evidence of Endocrine Disruption Activity

SUBSTANCE NOTES:

1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE (1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE)

ID: **24969-26-4**

%: **0.1300** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Bushing**

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

SUBSTANCE NOTES:

SORBITAN, TRI-9-OCTADECANOATE, POLY(OXY-1,2-ETHANEDIYL) DERIVS., EO 15 AND 20 MOL (SORBITAN, TRI-9-OCTADECANOATE, POLY(OXY-1,2-ETHANEDIYL) DERIVS., EO 15 AND 20 MOL)

ID: **9005-70-3**

%: **0.1200** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Paint**

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

SUBSTANCE NOTES:

WHITE MINERAL OIL (WHITE MINERAL OIL)

ID: **8042-47-5**

%: **0.0700** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Paint**

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

SUBSTANCE NOTES:

Section 3: Certifications and Compliance

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

VOC EMISSIONS — **SCS Indoor Advantage Gold**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Green Bay, WI
CERTIFICATE URL: https://www.scscertified.com/products/cert_pdfs/KI_2017_SCS-IAQ-03102_s2.pdf

ISSUE DATE: 2017-06-02
EXPIRY DATE: 2018-06-01
CERTIFIER OR LAB: SCS Global Services

CERTIFICATION AND COMPLIANCE NOTES:

MULTI-ATTRIBUTE — **BIFMA Furniture Sustainability Level 2 (e3-2014)**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: Green Bay, WI
CERTIFICATE URL: https://www.scscertified.com/products/cert_pdfs/KI_2016_SCS-SCF-03500_s4.pdf

ISSUE DATE: 2015-12-16
EXPIRY DATE: 2018-12-15
CERTIFIER OR LAB: SCS Global Services

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 HPD AVAILABLE — HPD URL: **No HPD Available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
GENERAL CLEANING KI stack seating requires minimal maintenance. It requires no more care than any other fine seating. Proper

care and careful use are the best methods of maintaining the appearance, finish, and function of any product. Periodic light cleaning is all that is necessary. Stains and spots may require more cleaning attention (see below). PLASTIC/POLY PARTS Sunnyside Plastic Cleaner is ideal for light cleaning. Buffing with this product restores luster to smooth services. Its anti-static properties help repel dust and dirt. High quality wax, such as Johnson's "Glo-Coat" or "Simonize", restores luster and protects the finish. Follow container directions and apply with a soft cloth and buff thoroughly. For chewing gum and similar stubborn spots, remove with cigarette lighter fluid. Wipe dry immediately. POWDER-COATED FRAMES It is recommended that frames be kept dry and away from water, rain, ice, snow, and salt. To clean frames, use warm water and mild soap, then dry thoroughly. Wax or furniture polish may be applied after cleaning. FABRIC UPHOLSTERY Be sure to vacuum upholstery frequently and thoroughly. Use a foam-type cleaner such as Johnson Wax “Glory” or Earl Grissmer Co. “Blue Lustre” for general cleaning. For more stubborn spots and stains, use Texie Chemical Co’s “K2r”. Always follow the manufacturer’s directions. Do not use dry-cleaning agents on upholstery. ARMS If your chair has arms, the fasteners attaching the arms to the underside of the seat should be periodically tightened. LAMINATE TABLET ARMS To clean the laminate, use a mild solution of water and detergent on a soft cloth. (Pine cleaner and warm water works well.) Wipe clean with a dry cloth. Do not soak product. Some stains such as grape juice may be removed by wetting the surface and sprinkling with baking soda, then wiping clean with a damp cloth. (Do not allow the baking soda to remain more than two minutes.) As always, thoroughly dry the surface with a dry cloth. Never use harsh abrasives such as Comet cleanser, scrub pads, etc. to clean the surface. The exposed plywood edge is finished in Tung oil. Avoid contact with solvents. Furniture polish may be applied to maintain a bright attractive finish on the entire laminate surface. CAUTION: Do not use a coarse cloth when applying cleaning agents to smooth surfaces.

Section 5: General Notes

Disassembly instructions are available on the KI website when the customer would like to recycle or reuse parts at the end of the product's life - http://datahub.ki.com:8081/KiPortal/documents/download/P0033-0079

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **KI**
ADDRESS: **1330 Bellevue Street**
Green Bay WI 54115, United States
WEBSITE: **www.ki.com**

CONTACT NAME: **Lisa Kaster**
TITLE: **Sustainability Manager**
PHONE: **920-406-3533**
EMAIL: **lisa.kaster@ki.com**

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.