

HPD UNIQUE IDENTIFIER: 28988

CLASSIFICATION: 14 20 00 Elevators

PRODUCT DESCRIPTION: Elevators also called as lifts are permanently serving buildings and constructions designed for the transportation of persons, goods, and materials in a vertical manner. Elevator systems consist of subsystems and components. The HPD includes the content inventory above the threshold limit specified for the whole product as delivered to the job site. The declaration covers the standard KONE MonoSpace®500 elevators range installed in Europe, parts of which are manufactured at KONE owned operated sites or purchased from KONE suppliers.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i> Characterized ☐ Yes Ex/SC ☒ Yes ☐ No <i>% weight and role provided for all substances.</i> Screened ☐ Yes Ex/SC ☒ Yes ☐ No <i>All substances screened using Priority Hazard Lists with results disclosed.</i> Identified ☐ Yes Ex/SC ☒ Yes ☐ No <i>All substances disclosed by Name (Specific or Generic) and Identifier.</i>
☐ Nested Materials Method	☐ 100 ppm	☐ Considered	
☒ Basic Method	☒ 1,000 ppm	☐ Partially Considered	
Threshold Disclosed Per	☐ Per GHS SDS	☒ Not Considered	
☐ Material	☐ Other	Explanation(s) provided for Residuals/Impurities?	
☒ Product		☒ 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

MONOSPACE® 500 DX | STEEL NoGS IRON OXIDE LT-UNK

STAINLESS STEEL NoGS SLAGS, CAST IRON-MANUFACTURING - SUBSTANCE FORMED DURING THE PRODUCTION OF CAST IRON. CONSISTS PRIMARILY OF FUSED SILICATES OF ALUMINUM, CALCIUM AND IRON. NoGS PORTLAND CEMENT LT-P1 | CAN | END

ZINC, ELEMENTAL LT-P1 | END | MUL | PHY | AQU COPPER LT-P1 | RES | GEN ALUMINIUM NoGS POLYVINYL CHLORIDE (PVC) (PRIMARY CASRN IS 9002-86-2) LT-P1 | RES SOLID / PLATE GLASS (USE SODA-LIME SILICATE GLASS [2446523-50-6] INSTEAD) LT-UNK

POLYURETHANE FOAMS LT-UNK POLYAMIDE FIBERS NoGS LIMESTONE (PRIMARY CASRN IS 1317-65-3) BM-3dg KAOLIN (PRIMARY CASRN IS 1332-58-7) LT-UNK | CAN LEAD BM-1 | END | PBT | REP | MUL | CAN | DEV | GEN POLYPROPYLENE (PRIMARY CASRN IS 9003-07-0) LT-P1 | RES |

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:

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: CDPH Standard Method V1.2 (Section 01350/CHPS) - Residential scenario

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?	PREPARER: Self-Prepared	SCREENING DATE: 2022-05-08
☐ Yes	VERIFIER:	PUBLISHED DATE: 2022-06-30
☒ No	VERIFICATION #:	EXPIRY DATE: 2025-05-08

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

MONOSPACE® 500 DX

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: As no hazard warnings were found for the steel, which makes up the major part of the elevator, no residuals and impurities were considered for the product.

OTHER PRODUCT NOTES:

STEEL

ID: 12597-69-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-05-31 23:12:47

?: 51.0000 - 56.0000 GS: NoGS RC: Both NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
-------------	------------------------	----------

None found		No warnings found on HPD Priority Hazard Lists
------------	--	--

SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers.

IRON OXIDE

ID: 1332-37-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-05-31 23:23:46

?: 25.0000 - 28.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Binder

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
-------------	------------------------	----------

None found		No warnings found on HPD Priority Hazard Lists
------------	--	--

SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers.

STAINLESS STEEL

ID: 12597-68-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-05-31 23:24:35

?: 11.0000 - 12.0000 GS: NoGS RC: Both NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
-------------	------------------------	----------

None found		No warnings found on HPD Priority Hazard Lists
------------	--	--

SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers

SLAGS, CAST IRON-MANUFACTURING - SUBSTANCE FORMED DURING THE PRODUCTION OF CAST IRON. CONSISTS PRIMARILY OF FUSED SILICATES OF ALUMINUM, CALCIUM AND IRON.

ID: 94551-83-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-05-31 23:25:23			
%: 5.4000 - 6.0000		GS: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
None found			No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers.					

PORTLAND CEMENT			ID: 65997-15-1		
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2022-05-31 23:34:55		
%: 2.8000 - 3.0000		GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
CAN	MAK		Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification		
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor		
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers					

ZINC, ELEMENTAL			ID: 7440-66-6		
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2022-05-31 23:33:46		
%: 1.0000 - 2.0000		GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Galvanizing
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor		
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1		H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1		H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
SUBSTANCE NOTES: Substance range is provided to safeguard the proprietary information of KONE and its suppliers. Since zinc is applied as the coating in some of the steels, it is inert in the final product and highly unlikely to leach from the steel to the environment. The risk of direct exposure to zinc is negligible and the hazards can be considered irrelevant to the downstream users.					

COPPER					ID: 7440-50-8	
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2022-05-31 23:31:53			
%: 0.9400 - 1.0000		GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Electronic component	

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
GEN	GHS - New Zealand	Germ cell mutagenicity category 1
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers		

ALUMINIUM

ID: 15629-83-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-05-31 23:31:00		
%: 0.9000 - 1.0000	GS: NoGS	RC: UNK	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found	No warnings found on HPD Priority Hazard Lists			
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers				

POLYVINYL CHLORIDE (PVC) (PRIMARY CASRN IS 9002-86-2)

ID: 93050-82-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-05-31 23:42:59		
%: 0.4300 - 0.4800	GS: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Electronic component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
RES	AOEC - Asthmagens		Asthmagen (Rs) - sensitizer-induced	
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers				

SOLID / PLATE GLASS (USE SODA-LIME SILICATE GLASS [2446523-50-6] INSTEAD)

ID: 65997-17-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-05-31 23:41:56		
%: 0.4000 - 0.4300	GS: LT-UNK	RC: PreC	NANO: No	SUBSTANCE ROLE: Glass component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found	No warnings found on HPD Priority Hazard Lists			
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers				

POLYURETHANE FOAMS

ID: 9009-54-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-05-31 23:45:50		
%: 0.1900 - 0.2100	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found	No warnings found on HPD Priority Hazard Lists			
SUBSTANCE NOTES:				

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2022-05-31 23:46:37		
%: 0.1900 - 0.2100		GS: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
None found			No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES:					

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-05-31 23:48:25		
%: 0.1600 - 0.1800	GS: BM-3dg	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers				

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2022-06-27 2:14:25		
%: 0.1400 - 0.1500	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Ceramic body
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
CAN	MAK		Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification	
SUBSTANCE NOTES:				

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2022-05-31 23:15:23		
%: 0.1300 - 0.1500		GS: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Electronic component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor		
PBT	OSPAR - Priority PBTs & EDs & equivalent concern		PBT - Chemical for Priority Action		
REP	EU - SVHC Authorisation List		Toxic to reproduction - Candidate list		
PBT	OR DEQ - Priority Persistent Pollutants		Priority Persistent Pollutant - Tier 1		
MUL	ChemSec - SIN List		CMR - Carcinogen, Mutagen &/or Reproductive Toxicant		
CAN	CA EPA - Prop 65		Carcinogen		
CAN	IARC		Group 2b - Possibly carcinogenic to humans		
CAN	MAK		Carcinogen Group 2 - Considered to be carcinogenic for man		

CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
DEV	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
REP	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
GEN	MAK	Germ Cell Mutagen 3a
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
REP	GHS - Korea	H360 - May damage fertility or the unborn child [Reproductive toxicity - Category 1]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
DEV	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H362 - May cause harm to breast-fed children [Reproductive toxicity, effects on or via lactation]
REP	GHS - New Zealand	Reproductive toxicity category 1

SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers. Lead is found in the lead-acid batteries which are commonly used in the elevators. Lead content is however very minimal. KONE customers also have the possibility to order the elevator with drive that uses lithium-ion batteries.

POLYPROPYLENE (PRIMARY CASRN IS 9003-07-0)
ID: 796853-32-2

HAZARD SCREENING METHOD:
Pharos Chemical and Materials Library
HAZARD SCREENING DATE:
2022-05-31 23:47:23

%: 0.1200 - 0.1300
GS: LT-P1
RC: None
NANO: No
SUBSTANCE ROLE: Polymer species

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
SUBSTANCE NOTES: Substance range is provided to safeguard proprietary information of KONE and its suppliers		

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	CDPH Standard Method V1.2 (Section 01350/CHPS) - Residential scenario		
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2022-06-	EXPIRY DATE:	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All	28		
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.

ACRYLIC SEALANT BLACK	HPD URL: No HPD available
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Used for jointing and sealing the different parts. VOC content < 20.0 g/l The installation chemicals in the HPD are representative of Monospace700 DX installed in Sweden.	

Section 5: General Notes

KONE MonoSpace® DX is an elevator for mid-rise and low-rise residential and commercial buildings with built-in connectivity for improved people flow and a new and inspiring user experience. Powered by a compact, energy-efficient KONE EcoDisc® hoisting motor, the KONE MonoSpace® DX saves valuable space in the building by completely removing the need for a machine room. KONE MonoSpace® DX machine room-less elevator offers digital services, optimized productivity during construction, eco efficiency features and an option for carbon compensation.

KONE also has a published Environmental Product Declaration for the MonoSpace® 500 which can be accessed via https://cer.rts.fi/wp-content/uploads/new_kone_monospace_500_dx_epd_22012714.pdf

MANUFACTURER INFORMATION

MANUFACTURER: KONE Corporation
ADDRESS: Keilasatama 3
Espoo - 02150, Finland
WEBSITE: www.kone.com

CONTACT NAME: Hanna Uusitalo
TITLE: Environmental Director
PHONE: +358204751
EMAIL: hanna.uusitalo@kone.com

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
BM-2 Benchmark 2 (use but search for safer substitutes)	
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- *a method for the assessment of exposure or risk associated with product handling or use,*
- *a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.