

HPD UNIQUE IDENTIFIER: 463553421312

CLASSIFICATION: 06 61 16 Solid Surfacing Fabrications

PRODUCT DESCRIPTION: Krion® Solid is a material intended for the manufacture of sanitary fittings, such as CE (EN 14527) and USA (CSA B45.5-17/IAPMO Z124-2017) certified shower trays; CE (EN 14688) and USA (CSA B45.5-17/IAPMO Z124-2017) certified washbasins/countertops; and CE (EN14516) and USA (CSA B45.5-17/IAPMO Z124-2017) certified bathtubs. Non-toxic and inert in compliance with REACH Regulation (Reg. (EC) 1907/2006), and Greenguard/Greenguard Gold criteria (UL 2818 standard and CDPH criteria, among others). Additionally, its composition is free of Bisphenol A and not toxic to the environment (following the criteria of OECD standards 207 and 208). Non-proliferation of bacteria (certified in accordance with regulation ISO 846), make it a hygienic and aseptic material.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	<i>For all contents above the threshold, the manufacturer has:</i>
☐ Nested Materials Method	☐ 100 ppm	☒ Completed	Characterized ☒ Yes ☐ No
☒ Basic Method	☒ 1,000 ppm	☐ Partially Completed	<i>Provided weight and role.</i>
Threshold Disclosed Per	☐ Per GHS SDS	☐ Not Completed	Screened ☒ Yes ☐ No
☐ Material	☐ Other	Explanation(s) provided :	<i>Provided screening results using HPDC-approved methods.</i>
☒ Product		☒ Yes ☐ No	Identified ☐ Yes ☒ No
			<i>Provided name and CAS RN or other identifier.</i>

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.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

KRION® SOLID [ALUMINUM HYDROXIDE (AL(OH)) NoGS

UNDISCLOSED NoGS 2-BUTANONE PEROXIDE LT-P1 MAM | GEN | EYE | SKI | AQU | PHY TITANIUM DIOXIDE BM-1* CAN | END | MAM]

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This disclosure includes ingredients at the 1,000 ppm threshold. Exact ingredient percentages are withheld as KRION SOLID SURFACE, S.A.U.'s Intellectual Property.

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

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: GreenGuard - Gold (previously Children & Schools)

: GreenGuard - Gold (previously Children & Schools)

REGISTRATION, EVALUATION, AUTHORIZATION AND RESTRICTION OF CHEMICALS: REACH European Union Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

☐ Yes
☒ No

VERIFIER:
VERIFICATION #:

PUBLISHED DATE: 2024-02-08
EXPIRY DATE: 2027-02-07

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

KRION® SOLID

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes
RESIDUALS AND IMPURITIES NOTES: Krion® Solid is manufactured using mineral fillers and colorants encapsulated in resins and monomers. The polymerization of the UP resin gives, as finished form article, nontoxic to humans. This results are verified by different certifications like Greenguard Gold or Reach. Impurities present in raw materials has been taken into account based on supplier SDS. KRION SOLID SURFACE, S.A.U. only uses high purity raw materials in order to ensure the high-quality of its products and obtain the exclusive properties of Krion® Solid.	
OTHER PRODUCT NOTES:	

ALUMINUM HYDROXIDE (AL(OH))ID: 20768-67-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-02-07 9:36:44	
%: 60.0000 - 70.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Inert, white and translucent powder that is also called aluminum hydroxide. This flame retardant is mixed with other components like resins, monomers and colorants in order to obtain Krion® Line by a controlled polymerization system. This allows the total encapsulation of every component that Krion® Line is made up of. As described, the final article, Krion® Line, is nontoxic and non-allergic to humans.

UNDISCLOSEDID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-02-07 9:43:15	
%: 20.0000 - 35.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Liquid pre-polymer typically used in the solid surface manufacturing process that usually contains reactive monomers like methyl methacrylate and/or styrene. Biobased unsaturated polyester resins are normally made with Ortophtalic or Isophtalic Acid, Neopentyl Glycol and a promoter.

2-BUTANONE PEROXIDE

ID: 1338-23-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2024-02-07 9:57:08

%: 1.0000 - 2.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Initiator
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
GEN	GHS - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
EYE	GHS - New Zealand	Serious eye damage category 1		
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]		
SKI	GHS - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]		
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2		
SKI	GHS - New Zealand	Skin corrosion category 1B		
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]		
MAM	GHS - Korea	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 2]		
EYE	GHS - Korea	H318 - Causes serious eye damage [Serious eye damage/irritation - Category 1]		
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - Category 2]		
PHY	GHS - Japan	H241 - Heating may cause a fire or explosion [Organic peroxides - Type B]		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
SUBSTANCE NOTES: Unsaturated polyester resins, as well as other thermoset resins, polymerize through the initiators action. Commonly used, the 2-butanone peroxide triggers a molecular cross-linking process at room temperature obtaining a cured polyester.		

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-02-07 10:00:03		
?: 0.0000 - 2.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**		
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**		
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**		
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value**		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor**		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels**		
CAN	IARC	Group 2b - Possibly carcinogenic to humans**		
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**		
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)

SUBSTANCE NOTES: Titanium dioxide is the most widely used pigment due to the extremely white and bright final color. These oxides are present in several minerals. Due to the high stability, the final color of Krion® Solid articles are stable and homogeneous. Inorganic pigments are essential for the aesthetic final Krion® Solid articles. In the final product, Krion® Solid is a polyester based polymer without hazards for humans.

**Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

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	GreenGuard - Gold (previously Children & Schools)	
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: This certificate, provided by UL - Environment, ensures that Krion® Solid has not any significant impact on indoor air pollution levels. Greenguard Certification meet some of the most rigorous criteria helping reduce indoor pollution. This certificate allows Krion® Solid to be used in Offices and Classrooms. Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.1-2017 using a Classroom Environment with an air change of 0.82 hr⁻¹ and a loading of 94.60 m²; and Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.1-2017 using an Office Environment with an air change of 0.68 hr⁻¹ and a loading of 33.40 m². Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2. Certificate number: 81038-420. CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE: 2016-06-30 00:00:00 EXPIRY DATE: 2024-07-09 00:00:00	CERTIFIER OR LAB: UL ENVIRONMENT
FORMALDEHYDE EMISSIONS	GreenGuard - Gold (previously Children & Schools)	
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: This certificate, provided by UL - Environment, ensures that Krion® Solid has not any significant impact on indoor air pollution levels. Greenguard Certification meet some of the most rigorous criteria helping reduce indoor pollution. This certificate allows Krion® Solid to be used in Offices and Classrooms. Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.1-2017 using a Classroom Environment with an air change of 0.82 hr⁻¹ and a loading of 94.60 m²; and Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.1-2017 using an Office Environment with an air change of 0.68 hr⁻¹ and a loading of 33.40 m². Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2. Certificate number: 1001045638-3336955 CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES:	ISSUE DATE: 2016-06-30 00:00:00 EXPIRY DATE: 2024-07-09 00:00:00	CERTIFIER OR LAB: UL ENVIRONMENT
REGISTRATION, EVALUATION, AUTHORIZATION AND RESTRICTION OF CHEMICALS	REACH European Union Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals	

CERTIFYING PARTY: Third Party
ISSUE DATE: 2016-07-13 00:00:00
CERTIFIER OR LAB: SGS

APPLICABLE FACILITIES: The REACH regulation is aimed at controlling chemical products that are manufactured or included as substances in mixes or end products in the EU. Its main goal is to safeguard human health and the environment. As part of its ongoing commitment to offer clients the best high-performance product on the market conspicuous for its quality while also caring for the environment, Krion® Solid has conducted tests to verify that none of the substances on the SVHC (Substances of Very High Concern) list, published by ECHA (European Chemicals Agency), are present in its formula. Krion® Solid complies with Article 7 “Registration & Notification of Substances Contained in Items” of the REACH Regulation and with the fact that it does not contain any SVCH in a concentration of over 0.1 %. Certificate Number: T31620230173SC
EXPIRY DATE:
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.

KRION® ADHESIVE
MANUFACTURER (OR GENERIC): **KRION SOLID SURFACE, S.A.U.**

HPD URL: <https://hpdrepository.hpd-collaborative.org/>
ACCESSORY TYPE: Adhesive
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Krion® Adhesive can be used for creating inappreciable sections with Krion® Solid. These adhesives must always be used in a well ventilated place, stored in a cool place and use any neccessary protection (goggles, gloves, etc.). Before using it, read the "Use Instructions". Krion® Adhesive are formulated with the latest technology for the surfacing industry and offers excellent bonding. It has high resistance to water, scuffing and high temperatures and also possesses greater toughness and impact resistance than most other adhesives in the market. Fabricators will benefit from the environmental conformance properties of Krion® Adhesive as well. They are manufactured to the highest standard available and faces stringent quality control tests prior to sale and distribution, meeting the requirements for Low VOC emission limits (certified by Greenguard & Greenguard Gold) and having verified that comply with the european REACH Regulation, among others.

E Section 5: General Notes

Krion® Solid is a solid surface material, manufactured in sheet shape. It is composed by inert mineral, unsaturated polyester resin and colorants creating a Krion® Solid HPD v2.3 created via HPDC Builder Page 6 of 9 new generation of solid surface able to improve the main properties of other products. Krion Solid Surface, S.A.U. not only has been working directly on people's health, also has been working on environment. Certifications like ISO 14001 or ISO 50001 certifications for its facilities, demonstrating its compromise with people and environment. In order to prevent workers who use Krion® Solid. Krion Solid Surface, S.A.U. through Porcelanosa Grupo is Global Compact signatory entity from 2015. This Global Compact collects 10 Principles referred to Human Rights, Labor, Environment and Anti-corruption. This commitment is communicated to all the stakeholders and anually revised in order to inform about the progress in the implementation of the 10 Principles.

MANUFACTURER INFORMATION

MANUFACTURER: **KRION SOLID SURFACE S.A.U.**
ADDRESS: **Ctra. Vila-Real - Puebla de Arenoso (CV-20) Km. 1**
Vila-real, Castellón 12540
COUNTRY: **SPAIN**

WEBSITE: **<http://www.krion.com/en/>**
CONTACT NAME: **Vicente Serrano Font**
TITLE: **Technical Manager**
PHONE: **+34 964 50 64 64**
EMAIL: **vserrano@krion.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-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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

