Starlike® Crystal
by Litokol Lab S.p.A.

SCREENING DATE: 2026-09-16
PUBLISHED DATE: 2026-10-01
EXPIRY DATE: 2029-09-16
PREPARER: Self-Prepared

Health Product Declaration v3.0
created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 51326081
HPD UNIQUE PRODUCT ID: Not provided.
CLASSIFICATION: 03 63 00 Epoxy Grouting
PRODUCT TYPE: Epoxy Grout (Tile)
PRODUCT DESCRIPTION: A scientifically formulated, translucent epoxy gel enhanced with ultra-pure glass microbeads; it is waterproof, stain-resistant, and UV-resistant, designed for the highly hygienic, photochromic grouting of joints (0–3 mm) for all types of mosaics, tiles, porcelain stoneware, and large-format slabs. Level 2 Recycled Crystal Microsphere®. Formula protected by International Patent No. 102018000005366.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
→ Basic Method

Threshold Disclosed Per
→ Product

Threshold Level
→ 1,000 ppm

Residuals/Impurities Evaluation
→ Completed

Explanation(s) provided :
Yes

For all contents above the threshold, the manufacturer has:

Characterized Yes
Provided weight and role.

Screened Yes
Provided screening results using HPDC-approved methods.

Identified No
Provided name and CAS RN or other identifier.

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

STARLIKE® CRYSTAL [UNDISCLOSED LT-UNK **UNDISCLOSED** LT-UNK **BISPHENOL A DIGLYCIDYL ETHER** LT-P1 | CAN | END | SKI | MUL | EYE | AQU **UNDISCLOSED** NoGS **FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL (PRIMARY CASRN IS 9003-36-5)** LT-P1 | MUL **OXIRANE, 2,2'-(OXYBIS((METHYL-2,1-ETHANEDIYL)OXYMETHYLENE))BIS-** NoGS **POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-HYDRO-.OMEGA.-HYDROXY-, ETHER WITH 4-HYDROXY-2,2,6,6-TETRAMETHYL-1-PIPERIDINEETHANOL (2:1)** NoGS **TERT-BUTYL PHENYL GLYCIDYL ETHER** LT-P1 | SKI | MUL **1,2,3-PROPANETRIOL, GLYCIDYL ETHERS** LT-UNK]

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:

Antimicrobial Pesticides Reporting: This product does not contain substance(s) that are intentionally added above the [Product - 1,000 ppm] threshold to act as antimicrobials.

The product is supplied as a two-component system (Component A: epoxy paste/gel; Component B: catalyst). The cured final mixture or the declared main components are analyzed below. The manufacturer has withheld the identity of ceratain ingredients as trade secret. Proprietary ingredients have been screened for hazards using the CAS number to ensure safety. Supplier documentation is used to evaluate residuals and impurities. Residuals and impurities have been cosidered and cetermined below the 1000 ppm threshold.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 99.16 Regulatory (g/l): 500
Does the product contain exempt VOCs: No
Are colorants available that do not increase the VOC content of the base paint when tinted: N/A

COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: Emicode EC1 PLUS- very low emission
VOC content: Decorative Paint Directive 2004/42/CE (calculation method) - Phase 2

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.
Pre-checked for LEED v5 Human Health 1.

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 3.0, available on the HPDC website at: www.hpd-collaborative.org/hpd-3-0-standard

STARLIKE® CRYSTAL

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: Supplier documentation is used to evaluate residuals and impurities. Residuals and impurities have been considered and determined below the 1000 ppm threshold

OTHER PRODUCT NOTES: For additional product information, please visit our websaite at https://www.litokol.com

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2026-09-16 4:48:09**

%: **50.0000 - 60.0000** GreenScreen: **LT-UNK** RC: **PreC** 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex V listing due to intrinsic safety
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Flame Retardants
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Cosmetics & Personal Care Products

SUBSTANCE NOTES: The product is spherical; they are glass spheres, not fibers.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2026-09-16 4:48:10**

%: **15.0000 - 20.0000** GreenScreen: **LT-UNK** RC: **PostC** 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex V listing due to intrinsic safety
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List

		Flame Retardants
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Cosmetics & Personal Care Products

SUBSTANCE NOTES: The product is spherical; they are glass spheres, not fibers.

BISPHENOL A DIGLYCIDYL ETHER

ID: **1675-54-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-09-16 4:48:10**

%: **5.0000 - 15.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
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
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
END	EU - Priority Endocrine Disruptors	Category 2 - In vitro evidence of biological activity related to Endocrine Disruption
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Bisphenols and Phthalates
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective July 10, 2026 Red List substances to avoid in Living Building Challenge V4.0 projects

SUBSTANCE NOTES:

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-09-16 4:48:11**

%: **5.0000 - 8.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Catalyst**

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: The product is a polymer. For further information you must consult the SDS of the Starlike Crystal comp B product.

FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL (PRIMARY CASRN IS 9003-36-5)

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-09-16 4:48:10**

%: **2.5000 - 5.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Bisphenols and Phthalates

SUBSTANCE NOTES: For further information, please consult the SDS for Starlike Crystal Comp. A.

OXIRANE, 2,2'-(OXYBIS((METHYL-2,1-ETHANEDIYL))OXYMETHYLENE))BIS-

ID: **41638-13-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-09-16 4:48:11**

%: **2.5000 - 5.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

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:

POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-HYDRO-.OMEGA.-HYDROXY-, ETHER WITH 4-HYDROXY-2,2,6,6-TETRAMETHYL-1-PIPERIDINEETHANOL (2:1)

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-09-16 4:48:11**

%: **1.0000 - 2.4000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

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: For further information, please consult the SDS for Starlike Crystal Comp. A.

TERT-BUTYL PHENYL GLYCIDYL ETHER

ID: **3101-60-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-09-16 4:48:12**

%: **0.5000 - 1.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Viscosity modifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

1,2,3-PROPANETRIOL, GLYCIDYL ETHERS

ID: **90529-77-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-09-16 4:48:12**

%: **0.1000 - 1.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Viscosity modifier**

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:

Section 3: 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 — **Emicode EC1 PLUS- very low emission**

COMPLIANCE TYPE: Third-party certification
ISSUE DATE: 2025-09-04
EXPIRY DATE: 2030-09-04
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: GEV-EMICODE
COMPLIANCE DETAILS:
COMPLIANCE SCOPE: Product
APPLICABLE FACILITIES: Covers all
COMPLIANCE URL:
https://www.litokol.com/SDS/10841enEC1PLUSStarlikeCrystal.pdf
COMPLIANCE NOTES:

VOC CONTENT — **Decorative Paint Directive 2004/42/CE (calculation method) - Phase 2**

COMPLIANCE TYPE: Self-declaration
ISSUE DATE: 2026-09-07
EXPIRY DATE: 2030-09-07
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: Manufacturer Calculation
COMPLIANCE DETAILS:
COMPLIANCE SCOPE: Product
APPLICABLE FACILITIES: Covers all
COMPLIANCE URL:
COMPLIANCE NOTES: Subcategory "j": Two-pack performance coatings (high-performance products based on reactive binders, such as epoxy resins)

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

For a part A&B: The components of Starlike Crystal are sold as part A anb B. This HPD covers both the part A and part B materials usin the manufacturer's recommended mixing ratio 100 A:6.4 B. For all products: For additinal product information, please visit our website: https//www.litokol.com
Usage Phase (Cured State): Once components A and B are mixed, the epoxy gel transforms into an inert plastic solid with exceptional chemical and mechanical stability. The cured product releases neither toxic substances nor airborne dust.
Application Phase (Worker Safety): During mixing and application, the operator must wear protective gloves and safety glasses to avoid direct contact with the resins and liquid catalysts, thereby reducing the risk of contact dermatitis.
Solvent-free: Formulated without volatile solvents, it drastically reduces occupational exposure compared to older epoxy formulations.
The life-cycle environmental impact profile of this product is documented in the specific International EPD (registration no. EPD-IES-21590 or equivalent), which can be consulted on the EPD International portal. (https://www.environdec.com/library/epd21590 "Starlike® Crystal EPD).
The emission data in the HPD highlights that the product complies with the GEV-EMICODE EC1 Plus protocol, which imposes a strict limit for TVOCs after 28 days equal to 60 µg/m³ (corresponding to 0.00000006 g/L).

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Litokol Lab S.p.A.**
ADDRESS: **Via G. Falcone 13/1**
Rubiera, Reggio Emilia 42048
COUNTRY: **Italy**

WEBSITE: **www.litokol.com**
CONTACT NAME: **Stefano Pastorelli**
TITLE: **HSE Manager**
PHONE: **+390522622811**
EMAIL: **productsafety@litokol.it**

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

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 (due to insufficient data)
LT-P1 List Translator Possible 1 (Possible Benchmark-1)
LT-1 List Translator 1 (Likely Benchmark-1)
LT-UNK List Translator Benchmark Unknown
NoGS No GreenScreen.

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 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.