Protectosil BHN
by Evonik Corporation

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 969649152
CLASSIFICATION: 07 19 16 Silane Water Repellents
PRODUCT DESCRIPTION: A clear, penetrating, breathable VOC-compliant surface treatment for use on concrete. The unique 100% silane treatment (no solvent) penetrates the substrate and chemically bonds with silica to forma permanent attachment of the water repellent molecule. Creates a deep hydrophobic layer that prevents water and waterborne contaminants from entering the substrate and causing premature deterioration. By combining low surface tension with a tailored rate of reaction, Protectosil BHN is able to move through the moisture boundary layer that lines the pore structure of the substrate. This permits the development of uniform gradient permeation — a consistent level of protection throughout the entire depth of penetration — allowing for longer treatment life, especially on wearing surfaces.

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
- ○ Other

Residuals/Impurities Evaluation
- ◉ Completed
- ○ Partially Completed
- ○ Not Completed

Explanation(s) provided :
- ◉ Yes ○ No

For all contents above the threshold, the manufacturer has:

Characterized ◉ Yes ○ No
Provided weight and role.

Screened ◉ Yes ○ No
Provided screening results using HPDC-approved methods.

Identified ○ Yes ◉ 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

PROTECTOSIL BHN [ALKYLTRIALKOXYSILANE LT-UNK | SKI **]**

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... None

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

No inventory or screening notes.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 390 Regulatory (g/l): 390
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

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: EPA Method 24 - Volatile Matter Content (EPA 24)
VOC content: ASTM D5095

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4 Option 2.
Pre-checked for LEED v4.1 Option 1.

Third Party Verified?
- ○ Yes
- ◉ No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2024-05-29
PUBLISHED DATE: 2024-05-29
EXPIRY DATE: 2027-05-29

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

PROTECTOSIL BHN

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: FTIR is used in the quality control process to check for residual compounds in this product.

OTHER PRODUCT NOTES:

ALKYLTRIALKOXYSILANE ID: Undisclosed

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-05-29 7:17:01**

%: **60.0000 - 100.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Water resistance**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]

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

SUBSTANCE NOTES: CAS RN# not disclosed, alkyltrialkoxysilane, active material.

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 — **EPA Method 24 - Volatile Matter Content (EPA 24)**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2005-01-27 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: DL Laboratories

CERTIFICATION AND COMPLIANCE NOTES:

VOC CONTENT — **ASTM D5095**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2005-01-27 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: DL Laboratories

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

No notes for this product at this time.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Evonik Corporation**
ADDRESS: **Evonik Corporaton**
2 Turner Place
Piscataway, New Jersey 08854
COUNTRY: **United States**

WEBSITE: **www.protectosil.com**
CONTACT NAME: **Christopher Hitcho**
TITLE: **Scientist**
PHONE: **8482150153**
EMAIL: **christopher.hitcho@evonik.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
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 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.