

**CLASSIFICATION:** 09 65 16 Resilient Sheet Flooring

**PRODUCT DESCRIPTION:** High performance heterogeneous resilient sheet flooring with durable and practical design options. Embedded with SOUNDPROTEC acoustics performance technology, NOX LVS provides sound reduction with comfort underfoot. For flat, level surfaces in any area of the house even high-traffic, moisture-prone areas. NOX LVS offers durable flooring with looks that closely resemble natural materials. This HPD covers the ECOROL+ model (2mm-5mm), which has both color and design variations dependent on the print layer.

**Section 1: Summary**

**Basic Method / Product Threshold**

**CONTENT INVENTORY**

**Inventory Reporting Format**

- Nested Materials Method
- Basic Method

**Threshold level**

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

**Residuals/Impurities**

- Considered
- Partially Considered
- Not Considered

*All Substances Above the Threshold Indicated Are:*

**Characterized**  Yes Ex/SC  Yes  No

*% weight and role provided for all substances.*

**Threshold Disclosed Per**

- Material
- Product

**Screened**  Yes Ex/SC  Yes  No

*All substances screened using Priority Hazard Lists with results disclosed.*

Explanation(s) provided for Residuals/Impurities?  
 Yes  No

**Identified**  Yes Ex/SC  Yes  No

*One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.*

**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**

**NOX ECOROL+ (2MM-5MM) [ POLYVINYL CHLORIDE (PVC) LT-P1 | RES LIMESTONE, CALCIUM CARBONATE LT-UNK BIS(2-ETHYLHEXYL) TEREPHTHALATE BM-3dg CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE LT-UNK UNDISCLOSED LT-UNK MAGNESIUM ALUMINUM HYDROXIDE CARBONATE LT-UNK ZINC DIOLEATE LT-P1 | MUL CALCIUM STEARATE LT-UNK 1,3,5-TRIS(2-HYDROXYETHYL) ISOCYANURATE LT-UNK POLY(OXY-1,2-ETHANEDIYL), ALPHA-(1-OXO-2-PROPEN1-YL)-OMEGA-((1-OXO-2-PROPEN-1-YL)OXY)- LT-UNK HEXANEDIOIC ACID, POLYMER WITH 1,2-ETHANEDIOL AND 1,6-DIISOCYANATO-2,2,4(OR 2,4,4)-TRIMETHYLHEXANE, 2-HYDROXYETHYL ACRYLATE-BLOCKED NoGS 2-(ACRYLOYLOXY)ETHANOL LT-P1 | AQU | MAM | SKI | MUL 1,2(OR 3)-PROPANEDIOL,1-ACRYLATE LT-UNK | MAM | SKI DIPROPYLENE GLYCOL DIACRYLATE LT-UNK PENTAERYTHRITOL TRIACRYLATE LT-UNK | SKI | EYE 1-PROPANONE, 2-HYDROXY-2-METHYL-1-PHENYL- LT-UNK WATER BM-4 ]**

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-P1  
Nanomaterial ... No

**INVENTORY AND SCREENING NOTES:**

NOX Corporation worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 100 ppm threshold. Due to the proprietary nature of the information, the name and CAS numbers for certain chemicals have been redacted from this substance entry.

**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: RFCI FloorScore

**CONSISTENCY WITH OTHER PROGRAMS**

Pre-checked for LEED v4 Material Ingredients, Option 1 and Option 2

Third Party Verified?

Yes

No

PREPARER: ToxServices LLC  
VERIFIER: SCS Global Services  
VERIFICATION #: qGE-9436

SCREENING DATE: 2020-05-13  
PUBLISHED DATE: 2020-05-15  
EXPIRY DATE: 2023-05-13



# 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 2.1.1, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-1-standard](http://www.hpd-collaborative.org/hpd-2-1-1-standard)

## NOX ECOROL+ (2MM-5MM)

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: NOX Corporation worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 100 ppm threshold.

OTHER PRODUCT NOTES: This HPD covers the ECOROL+ (2mm-5mm) model, which has both color and design variations dependent on the print layer.

### POLYVINYL CHLORIDE (PVC)

ID: 9002-86-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-13

#: 41.01 - 55.59

GS: LT-P1

RC:

None

NANO:

No

ROLE: Wear Layer, Print Layer and PVC Mid-Bottom Layer Components

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES:

### LIMESTONE, CALCIUM CARBONATE

ID: 1317-65-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-13

#: 18.75 - 24.00

GS: LT-UNK

RC: None

NANO: No

ROLE: PVC Mid-Bottom Layer Components

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

### BIS(2-ETHYLHEXYL) TEREPHTHALATE

ID: 6422-86-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-13

%: **16.97 - 23.76**

GS: **BM-3dg**

RC: **None** NANO: **No** ROLE: **Wear Layer, Print Layer and PVC Mid-Bottom Layer Components**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

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

SUBSTANCE NOTES:

**CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE**

ID: **65997-17-3**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-13**

%: **4.00 - 8.60** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Glass Fiber Layer Component**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

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

SUBSTANCE NOTES:

**UNDISCLOSED**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-13**

%: **0.70 - 2.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Glass Fiber Layer Component**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

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

SUBSTANCE NOTES: **This chemical has been identified and screened by the preparer. Due to its proprietary nature, this chemical and its CAS# were not able to be disclosed on this HPD**

**MAGNESIUM ALUMINUM HYDROXIDE CARBONATE**

ID: **11097-59-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-13**

%: **0.45 - 0.54** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Wear Layer and PVC Mid-Bottom Layer Components**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

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

SUBSTANCE NOTES:

**ZINC DIOLEATE**

ID: **557-07-3**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-13**

%: **0.18 - 0.27** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Wear Layer and PVC Mid-Bottom Layer Components**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
<b>MULTIPLE</b>	<b>German FEA - Substances Hazardous to Waters</b>	<b>Class 2 - Hazard to Waters</b>

SUBSTANCE NOTES:

### CALCIUM STEARATE

ID: **1592-23-0**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-13**

%: **0.05 - 0.14** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Wear Layer and PVC Mid-Bottom Layer Components**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
<b>None found</b>		<b>No warnings found on HPD Priority Hazard Lists</b>

SUBSTANCE NOTES:

### 1,3,5-TRIS(2-HYDROXYETHYL) ISOCYANURATE

ID: **839-90-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-13**

%: **0.03 - 0.12** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Wear Layer and PVC Mid-Bottom Layer Components**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
<b>None found</b>		<b>No warnings found on HPD Priority Hazard Lists</b>

SUBSTANCE NOTES:

### POLY(OXY-1,2-ETHANEDIYL), ALPHA-(1-OXO-2-PROPEN1-YL)-OMEGA-((1-OXO-2-PROPEN-1-YL)OXY)-

ID: **26570-48-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-13**

%: **0.02 - 0.10** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Top Coating Layer Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
<b>None found</b>		<b>No warnings found on HPD Priority Hazard Lists</b>

SUBSTANCE NOTES:

### HEXANEDIOIC ACID, POLYMER WITH 1,2-ETHANEDIOL AND 1,6-DIISOCYANATO-2,2,4(OR 2,4,4)-TRIMETHYLHEXANE, 2-HYDROXYETHYL ACRYLATE-BLOCKED

ID: **141686-56-8**

%: **0.02 - 0.15**GS: **NoGS**RC: **None** NANO: **No** ROLE: **Top Coating Layer Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

**2-(ACRYLOYLOXY)ETHANOL**ID: **818-61-1**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-13**%: **0.01 - 0.10**GS: **LT-P1**RC: **None** NANO: **No** ROLE: **Top Coating Layer Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
MAMMALIAN	EU - GHS (H-Statements)	H311 - Toxic in contact with skin
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES:

**1,2(OR 3)-PROPANEDIOL,1-ACRYLATE**ID: **25584-83-2**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-13**%: **0.01 - 0.10**GS: **LT-UNK**RC: **None** NANO: **No** ROLE: **Top Coating Layer Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H311 - Toxic in contact with skin
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES:

## DIPROPYLENE GLYCOL DIACRYLATE

ID: 57472-68-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-05-13**

#: **0.01 - 0.05** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Top Coating Layer Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

## PENTAERYTHRITOL TRIACRYLATE

ID: 3524-68-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-05-13**

#: **0.01 - 0.05** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Top Coating Layer Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES:

## 1-PROPANONE, 2-HYDROXY-2-METHYL-1-PHENYL-

ID: 7473-98-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-05-13**

#: **0.00 - 0.03** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Top Coating Layer Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

## WATER

ID: 7732-18-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2020-05-13**

#: **0.00 - 0.17** GS: **BM-4** RC: **None** NANO: **No** ROLE: **Wear Layer, Print Layer and PVC Mid-Bottom Layer Components**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found**

**No warnings found on HPD Priority Hazard 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

### RFCI FloorScore

CERTIFYING PARTY: **Third Party**

APPLICABLE FACILITIES: **All Facilities**

CERTIFICATE URL:

[https://www.scs-certified.com/products/cert\\_pdfs/NoxCorporation\\_2019\\_SCS-FS-05753\\_s.pdf](https://www.scs-certified.com/products/cert_pdfs/NoxCorporation_2019_SCS-FS-05753_s.pdf)

ISSUE DATE:

**2019-10-**

**23**

EXPIRY

DATE:

**2020-09-**

**30**

CERTIFIER OR LAB:

**SCS Global**

**Services**

CERTIFICATION AND COMPLIANCE NOTES: **FloorScore® Indoor Air Quality Certified to SCS-EC10.3-2014 v4.0 Registration # SCS-FS-05753**

## 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

NOX Corporation worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 100 ppm threshold.



## MANUFACTURER INFORMATION

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MANUFACTURER: **NOX CORPORATION**

ADDRESS: **5F, Yoonil Bldg. 336, Hyoryeong-ro  
Seocho-gu, Seoul 06721, Korea**

WEBSITE:

<https://www.noxglobal.com/eng/w/page/main/main.php>

CONTACT NAME: **John Kim**

TITLE: **Product Manager of NOX Corporation**

PHONE: **+82-2-520-7690**

EMAIL: **johnkim@noxglobal.com**

## KEY

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**OSHA MSDS** Occupational Safety and Health Administration Material Safety Data Sheet

**GHS SDS** Globally Harmonized System of Classification 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 Unspecified (insufficient 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 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.*